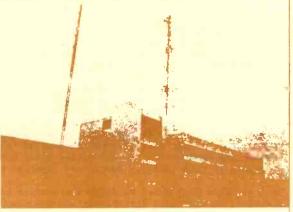
FRENDX



Thailand has an extensive radio service broadcasting news and feature programmes on 270 FM and AM radio stations throughout the country. Radio Thailand, which falls under the aegis of the Government Public Relations Department provides daily broadcasts through its World Service in nine foreign languages : English, French, Lao, Chinese (Mandarin), Vietnamese, Khmer, Malay, Japanese and Burmese. These daily broadcasts include news services, commentaries and feature programmes. There is also the Voice of Free Asia which broadcasts in Thai, English, Lao, Vigtnamese and Khmer.







ASSOCIATION OF NORTH AMERICAN RADIO CLUBS

NEWS

P.O. Box 143
Falls Church, VA 22046-0143

FOR IMMEDIATE RELEASE

New, Improved ANARC Computer BBS Now Open!

The new ANARC Computer bulletin-board system went online June 28th, according to system operator Kirk Baxter. The new telephone number is 309-688-0604. Open 24 hours a day, seven days a week, the system supports communications at 300 or 1200 baud, and uses standard transmission parameters (8-N-1). The BBS's mail address is: ANARC BBS, P.O. Box 3436, Peoria, IL 61614.

r In addition to message and file areas maintained by ANARC, there are areas for the ANARC-affiliated clubs, for Radio Netherlands' "Media Network" program, the FidoNet's international SWL and Ham EchoConferences, and for public messages relating to shortwave, VHF and UHF monitoring. Electronic editions of radio publications are also available in the magazine section. The first four ANARC clubs to open message areas in this new electronic showcase are NASWA, SPEEDX, the Association of Clandestine radio Enthusiasts (A*C*E) and the Minnesota DX Club (MDXC). Others are expected to join them soon.

Each club has been asked to designate someone to act as their subsystem operator, to work with Kirk Baxter and our new Computer Information Committee Chairman, David Snyder, in adapting the system software to each club's needs, and to oversee their club's message and file areas. Among the subsysops named so far are: Kirk Baxter (A*C*E), Dave Hammer (Miami Valley DX Club), Dave Marshall (All-Ohio Scanner Club), Tom McElvy (NASWA), Al Sampson (MDXC), Harold Sellers (ODXA) and John Trautschold (SPEEDX). Subsysops also serve on our Computer Information Committee.

Aside from the areas open to the public, the ANARC BBS can support private (password-entry) message and file areas for use by each club's officers and/or newsletter editors. This will make it possible, for example, for editors to upload their columns to the publisher without the delay imposed by the US Post Service, or relay texts electronically to a club member with a desktop publishing system. It will also enable "round-robin" policy discussions to take place online, streamlining decision-making processes. These are just a few ways we expect the ANARC BBS to improve club operations, while giving the modem-using public more insight into what radio clubs offer.

August 1988



Greetings, and welcome to CONTACT for August. We in the northeast have been roasting (steaming is, perhaps, a better description) in unimaginably oppressive weather. I wish that I could report to you that, in spite of it all, I spent many happy hours with the R-71, listening to all sorts of fascinating programming from dozens of SW broadcasters. Fat chance. The early morning is usually cool enough to do some listening, and in that regard, I want to pass on a tip: Swiss Radio International on 13685 or 17830MHz. I listen in at 0830UTC and reception is usually pretty good.

Well, the masthead is here to stay. After a good deal of work, I think I have arrived at something I can live with. Comments and suggestions will be gladly accepted. Certainly, I hope that you like it, too. It was executed in FreeHand, a graphics program from Aldus Corporation. This month's column was laid out in PageMaker, also an Aldus product.

A major change that I would point out to you is my arrival on the E-Mail scene. You are invited, encouraged even, to forward your letters and thoughts to me via CompuServe or GEnie. I will be interested to see if this has an effect on the quantity of communications I receive for

CONTACT.

Now on to something a little different. I throw the following out to you for your consideration and comment. A year or so ago, I gave my father a small SW radio: the Sony ICF-2002. He loves to listen to the radio, and used to listen (many years ago) to SW: he had an old Zenith TransOceanic—what a radio that was. In any event, the Sony proved an instant success. He is (as I am) fascinated with gadgets and the 2002 is certainly a gadget extraordinaire. I gave him a large list of frequencies (mostly for the BBC) which I update periodically. I was interested to see what his reactions would be to SW after so many years.

One of the first things he said to me was: "There's so much popular music! Why? You would think that everybody in the world could get more than enough of it on records, tapes and local radio. Why do SW broadcasters waste their time with it?" Now, my father has a distinct dislike for popular music, one I share to an extent and can understand. But the point of his question was not merely to express a dislike for popular music, but was an inquiry into why SW broadcasters seem to spend so much time promoting American culture—clearly the principal source of popular music for

the world—as opposed to promoting their own cultures.

Think about it: it is in fact a little odd. Perhaps 95% of all popular music is either American, or heavily American-influenced. It is as close to being reasonably universal as just about any form of communication can be. Yet broadcasters use time on SW (both expensive and intended to carry the outlook of the generating country) to reinforce the universality of the popular music (i.e., predominantly American) cultural experience. Why? A good question, or so it seems to me. Any thoughts?

One final note—Last month I told you that the International Listening Guide had not made its appearance. Well, in the meantime it has, and in a somewhat changed format. The work has been split into two seperate parts: the first is a listing-by-frequency that begins at 5MHz; the second part is a listing-by-time, and includes information on all broadcasters broadcasting in English, and a detailed listing of programs of interest to SWLs (very useful indeed). A highly recommended publication.

WRITE! Let's hear from you. This is, after all, your column. Good listening and many

best 73s-



Easy Listening

Editor: Alex Batman, 300 Hill St., Apt. 6, Boone, NC 28607

SUNDAY

- 1405-1415 Touring RSA (Radio RSA). Travel impressions of South Africa with the prospective tourist in mind. Past programs have featured country hotels in South Africa, a game reserve, and a ghost town on the southwest Namibian coast. Frequency is 21.590.
- 2325-2330 Lithuanian By Radio (Radio Vilnius). One of the most intelligently done language programs on shortwave. There is adequate attention to Lithuanian grammar as well as catch phrases in Lithuanian translated into English. I do not know whether a textbook is available for the course, but the program is very well done. Frequencies are: 9.640 // 11.790 // 15.180 // 15.455.

MONDAY

- 0130-0145 "Short Story (BBC). A good program of short stories sent in by listeners all over the world. Past stories have been about the ghost of a beggar who becomes reincarnated as the next door neighbor of the man who accidentally killed him, an undertaker who commits suicide, and a woman who finds out her married daughter is having an affair. If you wish to try our own luck with the BBC, stories should be around 2,000 words and never previously published. Frequencies are: 5.975 // 6.175 // 7.325 // 9.590.
- 0345-0350

 "Leafing through the Marxist/Leninist Press (Radio Tirana). This program was previously titled, "The Future of the Marxist/Leninist Movement Throughout the World is Growing in Scope and Strength," and I think Radio Tirana is to be commended for shortening it to a more manageable length. By Radio Tirana standards, the program is not bad, reading articles in the communist newspapers of such countries as France, Sweden, Brazil, England, and India, two to three articles per program. Check 7.065 // 9.760.

TUESDAY

- 2045-2100 "Music Program (W.C.S.N.). Each day this program features a different musical group or genre, Mondays' programs usually being reserved for theatrical music. Past programs have featured blues groups, Woody Herman, The Carpenters, etc. Appeal is to all musical tastes. Check 15.390. Repeated at 2245 on 15.300 and 0045 on 9.850) Monday through Friday.
- 0125-0230 "Youth Magazine (Radio Prague). A series of features with young people in mind. Past programs have featured a legendary giant in the Czech mountains, the Fair of St. Matthew in Prague, and a pop music group. Check 5.930 // 7.345 // 9.740 // 11.990. Repeated at 0325 on the same frequencies.

WEDNESDAY

- 0220-0230 Contemporary Brazil (Radiobras). Emphasis of this program is the political processes in Brazil, with the attention usually being given to the current debates in the Brazilian Constitutional Assembly. Frequency is 11.745.
- 0240-0255 Sun and Sea (Radio Portugal). Radio Portugal's tourist program which features different areas of interest in Portugal-such as the Extramadura or the Silver Coast— with attention to landmarks of interest, life style, and history of the area. Frequencies are: 6.060 // 9.635 // 9.705 // 9.680. Mondays and Wednesdays.

THURSDAY

- 1315-1330 "Arts Review (Radio Finland). Radio Finland's culture oriented program. Past programs bave featured the Nordic Theater Festival, the 500th anniversary of printed books in Finland, and portraits of Finnish writers and artists. Check 15,400 // 11.945. Repeated at 1415 on the same frequencies.
- 2315-2325 "Letterbox (Radio Vilnius). Unlike "Mailbag" which airs on Sundays, "Letterbox" does not answer listener questions, but merely reads and comments on letters from an international listening audience, though predominantly North American and European. Frequencies are: 9.640 // 11.790 // 15.180 // 15.455.

FRIDAY

- 0030-0045

 "Personal View" (BBC). A wonderfully entertaining series of programs in which respected British citizens given their "personal view" on a variety of topics, such as secular humanism, British politics, the position of women in Britain in the 1980s, personal reminiscences of boyhood (or girlhood) memories, and the housing problem in England. Frequencies are: 5.975 // 6.175 // 7.325 // 9.590.
- 0235-0250

 "Newsline" (Radio Netherland's). Radio Netherlands' current affairs program which takes a more comprehensive look at a number of stories in the news, such as the Russian withdrawal from Afghanistan, the Moscow Summit, US efforts to oust Noriega, etc. Check 6.020 // 6.165 // 9.590 // 9.895. Repeated at 0535 on 6.165 // 9.715. Monday through Friday.

SATURDAY

- 2150-2200 "History Club" (Radio Sofia). This Program only shows up on the first or second Saturday of the month and is devoted to Bulgarian history and historians. Check 9.700 // 11.720 // 11.950. Repeated at 0020 on the same frequencies and at 0320 on 11.750. First of second Saturday of the month.
- 2340-2400 "The Dialogue (Radio Kiev). This is Radio Kiev's listener contact program and is divided into three segments: the first answers listener questions, the second reviews listener comments, and the third answers questions again. Some programs are devoted exclusively to dialogue with Kiev's "sister city", Chicago, such as a telephone link-up between high school students in Kiev and Chicago or interviews with two members of Radio Kiev's staff who has spent a week in Chicago on a promotional tour. Frequencies are: 9.640 // 11.790 // 15.455. Repeated at 0210 on the same frequencies.

Page 3

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DX'ers Forum

Dedicated to Furthering the Art, Science and Enjoyment of DX'ing

Conducted by Rowland Archer, 5524 Hawthorne Park, Raleigh, NC 27613

August, 1988



I've been looking for a German foreign
language reception report
guide for a long
time, and I finally found one.
It's the EDXC
Reporting
Guide.

published by the European DX Council, the European

counterpart to ANARC. I read about the guide in the World DX Club's excellent Contact bulletin, and wrote to Michael Murray, Secretary Geoeral of the EDXC, for a copy. You can obtain one for \$3 (no foreign personal checks) or 6 IRC's. Besides containing a good overview of reception report writing and QSL'ing, the EDXC guide is one of the few to include German and Italian sample reports and DX vocabularies, as well as

French, Spanish, and Portugese. It's edited by well-known DX'er Anker Peterson, and is worth adding to your bookshelf. You can order it from:

European DX Council P.O. Box 4 St. Ives Huntingdon Cambs, PE17 4FE ENGLAND

Michael also sent along information about several other EDXC publications and cassette tapes. The table on the right includes the publication list with prices. I don't have room to include the cassette tape list this month-they are recordings of speeches given at past EDXC Conferences. I'm sure Michael would be happy to send you the list for a couple of IRC's. These publications may be ordered from Michael at the above address.

Ever wonder how the WRTH determines a station's QSL policy? A letter from Andy Senaitt, editor of the WRTH, comments on this subject raised in the June DX'ers Forum article on QSL'ing. Andy writes:

"...With regard to your comments about WRTH data on QSL policies, I would like to clarify our position. The wording of your article implies that the information in WRTH is supplied by the

stations themselves. In fact, although we do ask stations about their QSL policy as a matter of course, the information in the WRTH is now updated on an annual basis by DXer Finn Krone, who is something of an expert in this field (my opinion, not his, hi). [Finn Krone just received the ANARC International DX'er of the Year award, so Andy's opinion is shared by a few others -ed.]

The way we do it is to have Finn go through as many DX bulletins as he can get his hands on, and note details of what club members have actually received. Because QSLing is often a slow business, information published in WRTH reflects the general situation over the previous two years. Any station not reported as verifying for more than two years is indicated as a non-verifier. Similarly, if return postage is indicated this is what DXers themselves have indicated in their QSL reports, and does not necessarily mean that the stations insist on it.

Of course, there will be errors and discrepancies. QSLing is not an exact science. But generally, you can take it that if a station is listed in WRTH as a verifier,

EUROPEAN DX COUNCIL PUBLICATIONS

Club List: Compiled annually each Spring, the EDXC Club list contains full and comprehensive information about all the Council's Full and Observer Members, together with details about all their publications, specialization and membership criteria. UK, EUROPE & OVERSEAS: 40.75 or 3 IRC's

QSL Survey: This second edition of the successful EDXC QSL SURVEY examines the role of QSL's in the 1980's, looking at how they are regarded by international broadcasters. Find out how reports are used by broadcasters and engineers, and what is required from reporters.

UK & EUROPE: £0.50 or 2 IRC's WORLDWIDE: £0.75 or 3 IRC's

Radio Landlist: The third edition of the Council's list of existing and former radio countries for use in conjunction with QSL ladders and DX diplomas. The LANDLIST is also useful for keeping a record of countries heard.

UK & EUROPE: £1.00 or 4 IRC's WORLDWIDE: £1.50 or 6 IRC's

Euro DX: Published ten times each year, and available upon subscription, "EURO DX", the Journal of the European DX Council contains, on average, eight pages of information about the Council, together with reviews of articles appearing in member clubs' bulletins, station news and many other items of interest to today's shortwave listener and DXer, including important and authoritative feature articles about all aspects of international broadcasting. SAMPLE COPY: 3 IRC's worldwide.

someone somewhere has actually reported receiving a QSL. Where we say "No Rp.", this does not mean that no answer was received on this question from the station - it means exactly what it says!

I hope this clarifies the position of WRTH, and helps to reassure you regarding our sources of information. Of course, your input is very welcome - if you find info in WRTH which consistently conflicts with your own findings, please let us know. But always bear in mind that with staff changes, financial crises etc. affecting many stations in a given year, the QSL data in WRTH can at best be regarded as a guide, and not as a definitive source."

Thanks for writing to the Forum Andy. It's always useful to have a better understanding of what goes on behind the scenes. Perhaps Andy can shed some light on the Islamabad / Trarkhel question discussed in last month's column. As an incidental benefit, we now know how the editor of the WRTH abbreviates "World Radio TV Handbook," which is just as often abbreviated WRTVH as WRTH!

This month I'm pleased to present an interview with not one, not two, but all three North American DX Champions. The annual North American DX Champions is sponsored by Numero Uno, an organization of senior DX'ers. The contest is open to all. The rules were published in the January FRENDX, and the contest period was from February 13-22 this year. Contestants DXed for 48 hours of their choice, continuous or not, out of that period. The object was to log and identify as many stations and countries as possible. The NASWA country list was used. The first station logged from a country was worth 5 points, and each additional station from the same country counted for 1 point.

This year's top three finishers were James Young of Wrightwood, CA, with 1040 points (including 182 countries!); Don Moore of Athens, OH, with 754 points; and Dr. Harold "Dr. DX" Cones of Newport News, VA, with 585 points. All three top finishers received trophies, and the top twenty contestants received certificates recognizing their participation.

Since there is not a lot written about contest DX'ing, I thought you might be interested in knowing how the top place finishers approached this challenge. I found it fascinating to see that once again the old saw held true about organization, knowlege and experience being more important than ultra-expensive equipment. Although Jim was aided by a mountain-top QTH, Don captured second place with a makeshift 45' antenna, and Harold took third with an indoor antenna. I hope that even more DX'ers will enter the contest next year, after seeing that it doesn't take a mile-long antenna and a super-expensive receiver to finish in the top ranks.

An Interview with the North American DX Champions

by Rowland Archer

Forum: Congratulations on your achievement gentlemen, the competition was extremely tough and you came out on top. Have you ever entered any other DX competitions or was this your first effort? If you've entered others before, how did you do?

Young:

NNRC - Amateur Bands Competition - very well (1960's - 1970's)

ISWL - SW Listener's contest - very well (1960's - 1970's)

NNRC - SW Contests - 1st and 2nd place (1980's)

Moore: This is actually the first time I've entered a DX contest. I would have entered last year's NADXC, but plans for a weekend DX'pedition during the contest fell through and I ended up skipping it.

Cones: I entered the Rhein-Main (Germany) Radio Club Tropical Band contest in 1987 and came in 5th. I usually don't have the extended time for contesting, so have not been very involved in this aspect of the hobby.

Forum: How did you prepare for the contest? What was your game plan?

Young: Spent 2 months specifically logging as many countries / stations for a 'game plan' during the actual event. Had a 24 hour schedule with frequencies / times every 15 minutes for as many actual ID's (verbal, IS, language) as possible.

Moore: I decided well in advance that although hearing DX stations was important, the key was being sure to log all the easier international broadcasters and their relays as well. At the beginning of January I went through the WRTH country by country making three station lists: ones I should have no problem hearing; ones I could possibly hear; and ones I would like to hear for the contest, but weren't very likely. The first category actually was the most work, because that was where most of the big broadcasters fell. Hearing stations like Radio Bucharest or Radio Finland isn't really difficult, but I hadn't tried to hear them for years and had no idea of which broadcasts and frequencies were the best bets. Using Passport to WBR, the WRTH and the English broadcast schedule in Monitoring Times, I checked out broadcasts for these stations until I found one that came in well at my location. It wasn't as hard for the remaining stations. Most of these were tropical band stations, which are only on one or two frequencies anyway. The time of day to hear these is more dependent on propagation than station schedules. Basically, going into the contest I had three lists, from most to least probable, of stations to try for, along with the most likely times and frequencies for each station. It sounds like a lot of work, but I only spent about six or seven hours on it. Someone with less knowledge of the tropical bands might need more time.

Cones: I went "schedule shopping" in advance and attempted to lay out 100 quick countries in six time blocks. I then worked within the blocks and tried to stay on schedule. After these blocks were shopped out, I used non-listening times to work up new blocks.

Forum: What equipment did you use during the DX Championship? Did you set up anything new just for the

contest? Any special configurations (multiple receivers / tape recorders) or new antennas?

Young: 2 receivers (HQ-180A's), one with a digital readout (xxxxxx). Tape recorder and inverted vee's at 86' on top of 7500' mountain at my work. Several stations logged simultaneously, via tape recording.

Moore: I used my Yaesu FRG-7 receiver, hooked up to a simple Radio Shack cassette recorder during the entire contest. About a third of the time I doubled up and used my Sony ICF-7600D too. I would use the frog with headphones, and cunnect an earphone to the Sony. I could then slip the earphone under one earpiece on the headphones. Usual-

ly I would use the Sony to log the international broadcasters and stronger tropical band stations, and to check for parallel frequencies; while I used the frog for real DX. It wasn't too hard listening to two receivers at once. For one thing, I had the tape recorder in case I missed something on the frog. Also I would turn the volume down on a station if it was playing music, so as to give the other station more at-

tention. The only real problem was top of the hour IDs when I often had to pay close attention to both stations at once. For antenna I just used a temporary antenna of a 45 foot 16 gauge copper wire strung between my house and a tree.

Cones: Yaesu FRG-7700 with a MFJ-1040 preselector (serving mainly as a receiver switch) and a Grove Minituner; also brought the Drake R-4B on line for part of the time. I use a series of tuned dipoles and a homemade tropical band antenna, all mounted in the attic. I ran it all through a tape recorder for backup.

Forum: Now for the contest itself: how many hours did you spend DX'ing? Any trial runs or did you just wing it? (Did someone bring you meals and coffee?!)

Young: 48 hours spent during contest. My trial runs were over 100 hours. I used my microwave oven between 15 minute check points.

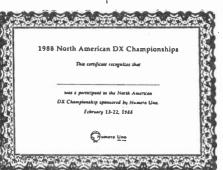
Moore: The contest allowed listening in any 48 onehour periods during the nine days. I used 32 periods, but didn't listen the entire hour in all of them. Probably about 27-28 actual listening hours. I would have spent more, but I'm a graduate student and the second weekend I had to do a take-home essay exam which took about twelve hours of my time. Time which otherwise would have been put to DX'ing. I didn't do any trial runs. I thought about it, but decided my paperwork was sufficient.

Cones: 25 hours, spread over 6 days. My longest chunk of time was 5 hours, my shortest, 1 hour. The key, I think, was setting my original 6 time blocks so that I could catch the morning Asians, late afternoon Africans, etc., and avoid a lot of duplication.

Forum: Did your actual time on the bands match your plans or did you have to adjust as the contest got underway?

Young: After 36 hours of 'game plan,' I did re-adjust hour / hour and re-plan contest time down to the last minute.

Moore: Actually I spent more time listening than I planned on. Basically the week before the contest I worked my behind off to get ahead in my studies. Thus I ended up with more time available than I had dreamed of.



Cones: As it usually goes, I did not have the extended time I wanted at the radio, but I did manage to get my aimed-for 6 time blocks covered, plus more. I almost did not enter because of a sudden rush uf nonradio things that came up over the contest period, but, as it wurked out, I managed to wiggle enough time.

Forum: Clearly one of the big challenges in a contest like this is to

balance the need to hear many stations per hour with the reality that a lot of the smaller stations don't 1D all that often. What techniques were helpful in dealing with this?

Young: I felt different countries had a greater point value, so I concentrated with countries rather than stations. Much of the time the second receiver was used to monitor for those stations that ID infrequently.

Moore: The two receiver setup was a great help in IDing stations. Also my paperwork gave me an advantage in terms of relay stations, where often there isn't any actual site ID to be heard, but instead parallel frequencies must be checked. Also I speak fluent Spanish and understand some Portuguese -- so I'm able to pick out ID's that might go by people who don't understand those languages.

Cones: Being familiar with the bands was the most help. I am familiar, for example, with the PNG regionals and their usual programming - in their case, I did not need to wait for an ID. The powerhouses ID often and you can pick up a quick 30-35 countries or so in no time at all with just these biggies. The Latins were the biggest problem and took the most time. My plan then was to go for the powerhouses first, the familiar ones next, then the tougher ones.

Forum: What references were the most useful before and during the contest? Please comment on any of your own records that were helpful.

Young:

- 1. ILG (West Germany) The very best!
- 2. RDI 1988
- 3. WRTVH 1988
- 4. NASWA Frendx
- 5. Fine Tuning current issues

6. ISWL

7. NASWA - DXtra (mid-month update)

Moore: Monitoring Times was very helpful for the international broadcasters schedules. For the tropical bands I relied mainly on my own experience. I've got a good memory for trivia, including station names, times, and frequencies; and I spend a lot of time DX'ing the tropical bands. So generally I knew what would be there, what might be there, and what I hoped would be there if I crossed my fingers enough. Club bulletins were beloful to check for new stations on the air.

Cones: The RDI was a big help, as well as "Monitoring Times." I maintain a current schedule file, which helped with the major broadcasters. I also made use of my card system which collects current reception information from FRENDX and other SWL publications (see April 1987 FRENDX, "DX'ers Forum"). Daisy the DX dog was also a great help.

Forum: How much of what you heard was pre-planned (targeted), vs. band-scanning? How did you decide whether to hang in there on a target that was coming in poorly or drop it and go on to something else?

Young: 95% was pre-planned. Very little band scanning was necessary, however, several periods I did just band-scan. Never really got any new countries via unplanned techniques such as band-scanning. If I heard a station 2 weeks before the contest, I stuck it out!

Moore: Over 90% of what I heard was targeted in my original plans (however I only picked up about 80% of what was in those plans). I tried to get around the "how long to listen to this station" factor by trying for stations I knew would be difficult to hear or don't ID often, around the top of the hour when ID's are more likely. Generally though if it was a station I had heard sometime before and was just relogging for the contest, I limited myself to about twenty minutes. However if I had never heard the station before at all, then I would listen as long as it took to ID (or until I lost it). I believe I spent about an hour on a new Peruvian.

Cones: I would say that 80% was pre-planned and 20% educated band-scanning. I sat on targets for quite a while early on, but as time ran thin, I would move on and keep checking back for better reception.

Forum: Any especially interesting loggings? First-time stations or countries?

Young: I missed only a few countries that I had under my 'game plan' from the 2 months of trial runs and preplanning of a logging schedule.

Moore: What really amazed me was when I went back through my records and found out that I had logged Bangladesh for the first time since I QSL'ed them in 1972. Also it was interesting that three previously well-heard but long inactive Latin American stations decided to reactivate the week of the contest (Radio Bolivar, Ven; R Nacional Espejo, Ecuador; and Radio Nacional Macapa, Brazil). To me though, the real highlight was logging a new Peruvian - Radio Contumaza 4495 - because it was my 100th Peruvian station heard.

Cones: I was pleased with Greenland (which I have not heard since and which was a new country for me), Nepal, 16 of the PNG regionals and Thailand. The contest just happened to occur during a super three-week Asian opening for this area which, I think, just goes to show that there is a lot of luck involved in this hobby.

Forum: What did you think your chances were when you were finished the contest? Were you surprised by the result?

Young: I felt they were excellent! But if you publish my answers (I have no objections either, hi, hi) my chances next year will be much less!

Moore: I felt about 80% certain I had done well enough to finish in the top twenty and gave myself about a 10% chance of making the top ten. I did not imagine at all that I would make the top three though. So I was very surprised, almost ecstatic, when I found out I was second.

Cones: I would have liked to have heard more countries but was pleased enough with what I heard in the time available. I had no idea where I would fall, since this was the first time I had entered this contest and did not know the norm. I felt I had "done good" overall, but was still surprised when I finished in the top three.

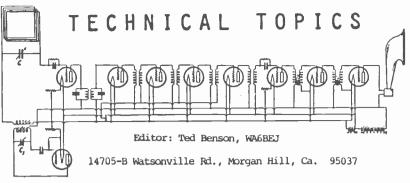
Forum: Any advice for next year's contestants, or any other comments?

Young: See all of the above. I realize that not everyone could spend 48 hours, nor were many on top of a 7500' mountain with switchable 90' high antennas. [ed. note: since NASWA did not organize the contest, the following comments really apply to Numero Uno] Thanks so much for the opportunity to participate. The certificate is beautiful, and I wasn't expecting a trophyl I think you have done a great job attracting listeners, quality loggings and the rules were well thought out. My hats off to you guys, 73-DX, Jim Young.

Moore: Remember the contest is supposed to be fun. I approached it this year with the desire to place, and did a lot of preparation to reach that goal. Because of that a couple times it started to become a chore. I'm thinking that next year I might just take it easy and wing it with no preparation at all. In the end it comes down to your personal goals for the contest. It's a great feeling to come in near the top of a contest like this. However, if placing is important to you - and it can be great fun - I think advance preparation is a necessity. But if you're just entering the contest to have fun, then forget the preparation and just tune around and see how well you do. A number of DX'ers did not participate because they felt they didn't have the time for the preparation. Not having the time to do the preparation necessary to win shouldn't keep anyone out of the contest. Every year thousands of people run in the Boston Marathon, and most of them don't expect to win. The bottom line is that we should be in the hobby for the fun

Cones: The real key to this contest, and for DX'ing in general, is organization. The better organized your shack, your equipment, and your information, the easier the quest.

Forum: Congrats one more time, and thanks to all you fine gents for a super contribution to DX'ers Forum.



ANTENNAS

A CHAIN IS ONLY AS STRONG AS ITS WEAKEST LINK

It has always seemed a shame to me that people spend vast amounts of money on expensive receivers and listening accessories, only to neglect the most crucial element of the receiving system: the antenna. I know that this statement is repeated endlessly, but think about it for a moment. You have just bought an R-71A receiver for around \$800. What do you connect to this sensitive, state of the art receiver? Many people still connect a length of random wire strung from their house to a yonder tree. Some do this because it is quick. Others do it because they are frightened by the apparent voodoo involved in choosing or building the "perfect antenna." They are not helped any by the myriad of wive's tales on the one hand, and overly pedantic reference books on the other. But having a good receiver and a lousy antenna is like running a VOA transmitter on a coat hanger. For those of you who don't want to become another Professor Yagi, but simply want a little more insight about antennas, read on...

You have all seen old photographs or drawings of huge antenna towers, frequently atop large buildings, from which were suspended curtains of wire. Indeed, until relatively recently, it was part of the F.C.C. logo (now replaced by Sesame Street type letters spelling "FCC." This is because in the early days of radio no one, not even the inventor(s) of radio themselves, had any real idea how the antenna worked. Tesla thought that the earth itself was carrying the radio wave. Marconi thought that the more surface area the antenna had, the more radio energy was released from it. Hence, huge curtains of wire were often suspended from towers to achieve even comparatively meager coverage. It wasn't until the twenties, and people like Professors Yagi and Uda (an antenna design bears Yagi's name today) that the true workings of the antenna were discovered.

The antenna, it was found, behaved like a resonant circuit. A good mechanical analogy is an organ pipe. A short pipe resonates at a high frequency; a long pipe resonates at a low frequency. And so it is with antennas. For each frequency there is an ideal length of antenna. Go much above or below that length and the antenna rapidly loses its ability to radiate energy. What does that have to do with reception? Lots! It was found that if all things were taken into account, an antenna optimized for transmitting was also optimized for reception. The so called "antenna reciprocity rule" was discovered. The only reason that bigger meant better in the early days is that the wavelengths used were so huge that no matter how large the antenna was it could never approach the ideal size. Fortunately for us, the sizes involved for shortwave frequencies are manageable, if not somewhat cumbersome.

The goal, then, is to make the antenna as close as possible to the ideal length for the frequency desired, and to put it as high as possible. Both of these goals can never be perfectly attained, but like perfection they can be sought after.

THE BASIC FORMULA

The basic formula for antenna length is derived from the formula for light. After all, in a vacuum radio waves travel at the speed of light.

wavelength x frequency - speed of light

Rearranged, this gives us:

wavelength = speed of light / frequency (in Hz)

So to find the wavelength of your ideal antenna, simply divide the speed of light (186,000 miles per second) by the desired frequency. Since the answer comes out in miles, a bit of manipulation yields a more useable formula:

wavelength (in feet) = 982 / frequency (in MHz)

Note that this gives the electrical length. There are two more minor problems to deal with. In anything other than a perfect vacuum radio waves don't travel at the speed of light. They travel slower. This results in a cycle completing itself in a shorter distance than the ideal. What does this mean? It means that the physical length of an antenna is shorter than the electrical length. This is great, because it means smaller antennas. And if you liked that, you will be pleased to know about the second "problem." You do not need a full wavelength antenna to get the desired affect. Depending on the type of antenna you use, you can use a length 1/4, 1/2, or 5/8's of the full sized model, often with little or no degradation of performance. For those of us who like the 49 meter tropical band we are not stuck with an antenna 160 feet long, but can use a half or even quarter wavelength antenna of 38 feet.

How do we arrive then at the correct *physical* length for an antenna at a given frequency? The following are formulas for corrected lengths, based on the velocity of radio waves through average materials:

936 / frequency (in MHz) = length (in feet) of 1 wavelength antenna

585 / frequency (in MHz) = length (in feet) of 5/8 wavelength antenna

468 / frequency (in MHz) = length (in feet) of 1/2 wavelength antenna

234 / frequency (in MHz) = length (in feet) of 1/4 wavelength antenna

From the above formulas, we can see that even a 1/4 wavelength antenna for a popular old - time frequency of 200 KHz would be over 1220 feet -- approaching a quarter of a mile long! No wonder they never built an antenna that failed to work because it was too long.

The shortwave listener would appear to have quite a selection of antenna sizes to choose from. To some extent this is true, but some antenna configurations (or "types") work better with a half wavelength, some with a quarter wavelength, and some with five-eights wavelength. This is so true that some antenna types are named for the fraction of a wavelength they represent. We have all heard of "half-wave dipoles" and "quarter-wave verticals." Even such oddities as the multiple wavelength Beverage antenna is known to denizens of the VLF spectrum.

PUTTING IT ALL TO WORK

What follows is a summary of the more popular antenna types, along with the lengths commonly used with each type. I have drawn-in the approximate reception lobes. These represent the relative amounts of R.F. energy received in any given direction. You will quickly see that each antenna has its own best direction(s) of reception. This can be utilized to select the best antenna for the type of signals you desire to receive. For example, many people wish a low angle of reception to capture DX signals, as these most often arrive at low angles to the earth. Others wish to receive low angle signals, but at the same time equally well in all directions, to avoid missing signals coming in at a any particular direction. By carefully analyzing each antenna type's pattern, you can pick the best antenna for your needs. Please note that the patterns shown are ideal, and actual antennas may vary somewhat due to many factors.

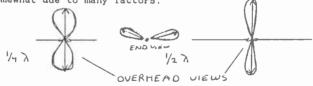


Figure 1

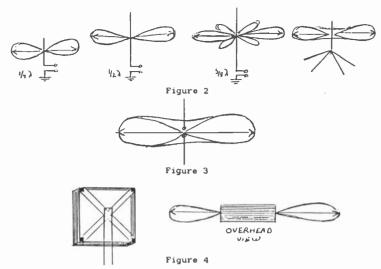


Figure 1 shows the ever-popular horizontal dipole in its two usual configurations: the half wave and quarter wave. This antenna is good for gain, that is it gives better reception than other types, but at a price — it is directional. Signals coming in toward the ends of the antenna are degraded. Also, this antenna likes to be high off the ground. The closer it is to the ground the higher an angle of reception it exhibits. Unless you want to hear Mars (the planet, not the net) keep it high.

Figure 2 is a vertical antenna, again showing several variations: the quarter-wave, the half-wave, the five eigths wave, and the ground plane. Note that in the first three versions the earth itself functions as part of the antenna. In the ground plane version a sort of umbrella beneath the vertical element takes the place of the earth as the other half of the antenna. The vertical antenna is excellent for omni-directional reception; it receives equally well in all directions of the compass. It does tend to pick up more noise, however, than horizontal antennas like the dipole above. Although the vertical antenna does pick up more noise than the horizontal types, it has the distinct advantage that it can be mounted at or near the ground, and you don't have to worry about picking up a station in one direction at the cost of a station in another direction.

Figure 3 shows unique variations of the horizontal dipole — the vertical dipole. It, like the horizontal, enjoys gain, but in all horizontal directions. The only drawback is that it must be mounted at a good height, and this is not easy with its long length.

Figure 4 is thrown-in for fun. It is the almost arcane directional loop antenna. It is fantastic for "nulling-out" interfering signals from desired stations, as it picks up best in two rather sharp directions. Because the loop is electrically rather short, it does not have the sensitivity of any of the above antennas, but it takes up much less space than any of the others, too. In many cases, gain is less important than getting rid of the adjacent frequency (or even adjacent location) interference. If so, this is the antenna for you. It is frequently employed by broadcast band DXers to "pick out the rare ones," but is also useful on the shortwaves. It can even knock-out the Russian (or American) Woodpecker

To summarize, there is no perfect antenna. But with a little care you can improve your reception by some judicious research and, as I urged in my first column, experimentation.

Next month we will take a look at antenna designs useable for multiple frequencies, as well as some accessories to enhance them.

73's
Tal

NASWA Awards ProgramAwards Chairman: John M. Kupinus, 86 S. Quinsyumand Ave., Shreusbury, MA 01545

Greetings and welcome to the August 1988 NASWA Awards Page. The following folks earned NASWA Awards since our last report:

Rowland ARCHER, Raleigh, NC: Senior DX Centurian, 170 country endorsement; Australian DXer: African Comtinental DXer

Richard E. DAVIS, Portales, NM: Master Papua New Guinea DXer

Joe <u>DILEO</u>, Waterbury, CT: Master Papua New Guinea DXer; Australian DXer; Senior Ecuadorian DXer; Master China DXer; Senior Radio Moscow DXer

Richard ECKMAN, San Jose, CA: All Voice of America DXer

Nobuaki TAKAHASHI, Tokyo, JAPAN: All Voice of America Dier

Sheryl PASZKIEWICZ, Manitowoc, WI: Maple Leaf DXer

Donna <u>ROBINSON</u>, Willow Springs, IL: Antarctic DXer; Senior British Commonwealth DXer

Thomas V. ROSS, Lyons, IL: Maple Leaf DXer; Arab World DXer

Roland SCHULZE, Stuttgart, WEST GERMANY: Master DX Centurian

Gayle <u>VAN HORN</u>, Orange Park, FL: Senior DX Centurian, 160 country endorsement; African Continental DXer

**** kap's komments ****

Hammm, interesting to note that 30% of our participants this month are YLs. Atta go, gals. Hey, wait a minute before inundating me with mail accusing me of being a male chauvinist pig. I think it's just great that the ladies are so involved in what has always been perceived (incorrectly) as a male dominated hobby.

This is not an official announcement of a new Award, but a word to the wise. Getting all 6 continents verified for receptions in a 12 hour UTC period might pay off in the future. Also, Time Stations will not count towards this EXCEPT if all 6 verifications are for Time Stations.

Since we are wearing 2 hats (kap's kaps) for NASWA these days, it's quite DK to send column contributions and Awards applications in the same envelope. We do open all our mail upon receipt.

The question of taped receptions in lieu of actual QSLs has again come up. We stand on our requirement that actual QSLs from the station be in the possession of the applicant. Looks like the prophets of doom who predicted the demise of hard copy QSLs a decade ago were wrong. It's true that some stations have drastically altered their QSL policies, but they are in the minority.

Rumors have it that the 1990 ANARC Convention may be held in Boston, sponsored by the Christian Science Broadcasting folks. Now if we could talk them into issuing QSLs we'd be all set.

Miracles do happen. I recently sent a reception report, PFC, SASE, and \$1.00 to a religious broadcaster utilizing the facilities of Radio Africa, Bata, Equatorial Guinea. Not only did I get the signed PFC back in a most reasonable amount of time, but the \$1.00 bill was returned to me. Try that one with our friends in Okochobee.

Till next month, Go Morgan's Raiders (a/k/a the Boston Red Sox)

CARD OF THANKS

To all my radio friends a sincere Thank You for your kindness and sympathy on the recent death of my Mother. Your notes and calls were sincerely appreciated. May God Bless You All.



isteners Notebook

GLENN HAUSER, Box 1684, Enid, OK 73702

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ALGERIA Monitoring 4-11 July: From 4/7 to 8/7 PLO-controlled V of Palestine svc carried by Alg R bc pgm solely of Koranic verses, patriotic songs w/no nx, commentaries or features. But still included VOP's usual opening & closing anmts. Returned to normal 9/7. Is daily 1702-18 on AR net 11715 7145 6160 1161 1098 1089 891 693 549 531 198 153 kHz. PLO pgms started on Alg R 14/9/70 under title "V of Fatah, V of the Storm". 5/6/72, obs w/name change to present "V of Palestine, V of the Palestine Revolution".

Monitoring 10/7: V of Free Sahara pgm continues via R Algiers ES, 22-23, in AR 15215 9640. Hostile to Moroccan govt, described as v of the struggling Saharaoui people (WBI 15/7)

AUSTRALIA RA reported 29/6: Is to be big increase in number of Aborigines and islanders working for ABC. Under joint agmt just signed in Brisbane w/Dept of Education, Employment & Training, ABC'll employ further 120 Ab & islander trainees over next 3-5 yrs. Corp chmn Mr Somervaille says ABC planning allocate abt 2% of staff numbers to Abs & isls and'll contrib M\$A+ to project over next 3 yrs. Said strategy acknowledges ABC's spl responsibility to Au's Abs & islander population (WBI 8/7)

AUSTRIA ORF's GM DX pgm Kurzwellenpanorama is now bc Sats 0030, 0205, 0805, 1905, Tues 1605, Suns 0330. DX Telegram is Sun 0055, 0255, 1010, 1325, 1610 (Mauro Lopiano, Franz Süss, Edwin Southwell, July DSWCI SWN) Sat 0030 supposed to be EG

BANGLADESH R Bang HS now on 4880 ex-4890 at 00-0330, 1250-16. Could be to avoid adj ch splash from AIR Kurseong 4895, which is strong--augmented power in view of GNLF agitation? Other HS outlets are 7080 0330-05; 6195 0430-09 (ex-11); 6170 1250-1715. Last fq co-ch AIR ES most of time. W/adoption of Islam as state religion pgms have got religious flavour. Prayer calls (azaans) carried regularly whereas before they were restricted to TV. More talks on Islam and Bengali folk songs on religion. ES to ME/Eu now 7505 & 9750 16-1630 AR, 1630-18 BG, 1815-19 EG. 9750 ex-6220. (Supratik Sanatani, Calcutta, India, 9/7) Plus slow news at 19-1915 on same--is that still on? (gh)

<u>BARBADOS</u> Caribbean News Agency (Cana) [not supposed to be in caps??] is developing a Cana Radio service for the broadcast media (WBI 8/7) I assume this will be voiced news input rather than xmtg stns (qh)

<u>BHUTAN</u> BBS, Thimphu has expanded pgming. 11-15 weekdays w/EG 1415-15; Suns 06-10 w/EG 09-10. Both on 5 kW 6035. Changed addr from P O Box 1 to 101 because Royal Palace wanted 1 for its own use. When R NYAB, BBS predecessor started by Ms Louise Dorji (Irish by birth), Thimphu GPO did not have any post boxes. A crate was then simply placed in the PO marked Box 1, NYAB. As Thimphu modernised, the concept of post boxes got popularised and 1 become a prestige number. Royal Palace wanted it and BBS obliged. BBS now has pgm on religion, Thurs. The one I hrd started w/

transcript of some Christian preaching & went on to talk on "Realism in Buddhism". The Christian preaching had such a poor audio quality that hardly anything could be made out. Probably old AWR recordings Adrian Peterson gave NYAB, and which were rarely used because the idea of preaching Christianity from the state radio of a Buddhist kingdom wasn't compatible. Now that BBS has managed to produce indigenous pgms on Buddhism in EG, the old AWR tapes are used as fillers and to give the pgm a secular [ecumenical] look (Supratik Sanatani, 9/7)

BOLIVIA R Monteagudo, 4935 (tho typo as 3945 I think they mean 4935), addr is Cajon Postal 156, Sucre. Studios and oficinas in Barrio "La Madona". Owner: Corporacion Desarollo de Chuquisaca. Dir-Gen Gilberto Valenzuela Monroy. Dir-Tec Jorge Grespo. 1 kW. Member of ASBORA (Asociacion Boliviana de Radiodif). Slogan "Ahora Si--Cordech en accion". 11-16, 19-02 (stn to WRTH via July DSWCI) Not reported since March 1987 per TBS 88 (Finn Krone, DSWCI ed)

R Fides uses 5 kW on 4945, 10 kW on 6155. Addr: Cas. 5782, La Paz. Oficinas & estudios: Jenaro Sanjines 799. Slogan "R Fides, su voz amiga". sked: 09-1730, 22-02. Plans incr to 50 kW on MW 760. Owner: Compania de Jesus. Dir-Gen Eduardo Perez Iribarne. Dir-Tec Jose Maria Lop Sebastia [sic] (stn 1/6 to WRTH) [It's beyond me why a § specializing in LAm info omits all the accents, but I'm in a hurry too and am tired of putting them in when no one else does--and it's not always clear where they belong on unfamiliar names -gh] (via DSWCI SWN July)

R Loyola, 5995, Casilla 155, Sucre has studios & offices at Calle Ayacucho 161. Owner: Compania de Jesus. Dir-Tec Javier Adelantado. Uses 500 watts. Slogan: "Voz de los sin voz", 10-17, 19-22 (stn 3/6 to WRTH via DSWCI)

R El Mundo, 6015, addr Cas. 1984, Santa Cruz de la Paz. Has 10 kW using ant 6 km from studios Parque Industrial P-I-7. Offices; Ballivian Esquina La Paz No. 100. Owner: Editorial "Oriente" SA. Dir-Gen Hugo Paz Mendez. Dir-Tec Benedicto Pozo. In net Prensa-Radio. Slogan "R El Mundo -- Sintonia Nacional" sked 0930-05 (stn 6/6 to WRTH via July DSWCI SWN)

R Panamericana reported 16/6: govt cancelled 15/6 for one year licences of TV Popular channel 4, and of R Metropolitana, for flagrantly violating telecomms law in airing people under investigation for drug trafficking (WBI 24/6)

BRAZIL O Estado de Sao Paulo reported 22/6: Brasilia natl FM & AM stns have repeatedly bc tape of Pres Sarney speech ancg govt privatisation campaign. RBras pres Antonio Martins takes seriously; has been selling off RB stns, so far 11 FM, 2 AM, one TV of the 37 total; plans to make a gigacruzado by yearend and be in the black. Stns considered of high social intrest left out of priv pgm--R Nacional da Amazonia w/SW xmsns reaching some 6 megapersons; 7 radio stns in various Amazon parts on tropical bands; and RNB, xmtg to forn countries in 5 langs (WBI 1/7)

R Ribeirao Preto, on new 3205, 19/6 & 20/6 2353-0027 w/Braz song, clear ID by 0023 (Krone, Ravigneaux, Monferini, Schmitz, Grundl at Glostrup, Denmark, DWSCI) Reactivated, believed the one hrd 29/5 0300, vy weak (Stig H Nielsen, ibid)

R Marajoara, 4955, usually a black stn QSLwise, sent stencil from v/s Ronaldo Porto, Dir Comercial. Addr: Trav. Vileta 1121, Bloco A, Apartado 207, Pedreira, 66240 Belem, Para. Is his home addr (Zet Jacobsson, SWB via DSWCI) And stn own addr is Trav. Campos Sales, 370 Centro, 66020 Belem (L-E Svensson, ibid)

R Cl Ribeirao Preto, 15415, v/s is Salvador Dali, Programador (Jussi Suokas in DX-Kuuntelija via DSWCI) Surreal

R Nacional, Porto Velho, 4945, my favourite Braz! Voz do Bras net pgm 2215, fast nx, pgm ended 2250 and whole thing shut down, nothing audible. Need more info on these; 4945 outlet may run variable sked, which may be why I don't hear it every day arnd 2200; 1/7 (Bob Padula, Surrey Hills, Vic, Australia)

BURMA BBS Rangoon w/vy powerful sigs on 5040, BM pgming //5985 from arnd 1230 till EG pgm s/off 1600. Also arnd 01 to s/off w/EG 0230 //7185. Powerful sigs are irregular. Other times, feeble. Apparently testing new SW xmtrs. For past 8 months noting feeble BBS pgm arnd 5060, which had been fq of Taunggi, 10-16 and assumed 1 kW Taunggi xmtr being used for BBS relay while Forces BCing Unit shifted to more powerful 6570 channel, which is obs 10-1330. But were doubts as to whether wildgoosechase by rcvr images since 5075 was 910 kHz away from 5985 (2 x 455). But then came Gordon Darling's rpt from Thailand that he noted 5040 //7185 at 02. Powerful sigs presently noted unseems from old Taunggi but definitely new xmtr. Strength at times better than 5985 eves, so believe 50 kW. 5040 not in fq anmts, but tests not yet over. Past few months Burma expanding radio net, new MW xmtr on 576 [probably explanation for erroneous 5760 reported elsewhere -gh], and a whole new "Forces Broadcasting Unit" (contrary to BBCMS mentg Maymo as location, we've not noted any mention of location) (Supratik Sanatani, 9/7)

CANADA RCI SWL Digest reported 25/6: RCI has begun discussions w/R Beijing on possible two-way relay; 2 hpd from next April. RNMN iv w/Allan Familiant, RCI Dir of Pgming, Opns 30/6: EG lessons for China being completed, 120 half hours carried on Shanghai, Beijing, Guangzhou domestic stns 3x a week, 4x a day during Sept-June school year (WBI 8/6)

 $\underline{\text{CHINA}}$ Tibet PBS, Lhasa reportd in Std Chinese 10/6: radio and TV main sources of info here, and increasing focus on Tibetan-lang being. Best fqs and broadest channels now used for TB lang. These fqs and chs account for 80% of all fqs used in Tibet (WBI 24/6)

Zhongguo Xinwen She nx agcy reported 27/6: Fuzhou PBS is starting pgm "Bcing to Mazu" from 2/7; 90 mins in Std CH & Fuzhou dialect at 0930 & 2135 Sats, repeated same time Suns (WBI 8/7) Better known to us as Matsu, Taiwan controlled island next to mainland (gh) much more, LMI

COLOMBIA LV del Cinaruco reactivated on 4865, first noted 10/7 0410 w/locally produced salsa pgm, TCs for Col & Venez, 0433 ID (so it hasn't been absorbed fully into Caracol as "Caracol Arauca" or something like happened to Neiva & Bogota; tho it is a Caracol stn) Quite loud as has been true for its past several reactivations, hi. Caracol main net (eg Bogota 4755, Neiva 4945) had been running new spots during the 0400 UTC nx hour, touting the SW outlets for Cols abroad to keep in touch, and they gave a 2nd fq for Neiva, 6150, Which I couldn't find at that hour, but 10/7 0600 it was there, loud and relatively clear. Guess you can't disbelieve everything you hear! I will be in Colombia for a year from about 20/8 (Richard Stoller, Canton CT)

R Macarena, 5975.1, 25/6 1044-1055, llanea mx, TC every 5 mins; 1051 new ID as "Desde el radiocentro TODELAR de Villavicencio, les habla Radio Macarena, HJKT 1080 kHz onda media, HJHZ 5975 kHz onda corta banda intl de 49 metros. TODELAR, el circuito del pueblo colombiano" w/TODELAR mx theme (Takayuki Inoue, Japan)

AFP reported 1/6: Comms ministry 31/5 suspended for 3 consecutive days the bcs of R Continental, main stn of Todelar net, for bcirgunconfirmed rpts on kidnapping of Alvaro Gomez Hurtado, lawyer, journalist, politician (WBI 17/6)

COSTA RICA Can you print the mailing addr for R for Peace Intl (C R Foxx Jr, Norfolk VA) Apartado 88, Santa Ana, Costa Rica; or Box 10869, Eugene OR 97440. RFPI sked is now Mon-Fri 18-21 [often starting as late as 1830] on 21555, 21-24 on 13660, Tue-Sat 01-04 7375, 0415-0715 13660. 21555 is beamed due N and comes in well in OK; beamwidth is such that it should cover most of NAm well except extreme coastal areas. 13660 is beamed toward Eu and Au simultaneously. First xmsn of new pgms is 21-24, rest are repeats. Try 21555 for WORLD OF RADIO Mon at 18, 1815, 1830, whenever they come on; Wed 20, 2015 or 2030 (gh)

 $\underline{\text{CUEA}}$ Monitoring 17-18 Jun: At end of R Moscow NAm svc xmsn in EG on 1040 kHz, the Cuban tourist stn R Taino hrd s/on w/anmt in EG & SP 2357 17/6: From this moment on, R Taino starts being on its fq 1040 kHz. In order to bring a better service to our listeners and to the tourists visiting our country, Radiotur of Cuba will stay on their fqs of 1040 & 1160 to be the intl festival Varadero 88 tonight. R Taino was hrd on 1040 //1160 and on 640 channel of R Progreso until 0330 18/6 (WBI 24/6) Causing the usual stir amorg NAB types (gh)

 \underline{CYPRUS} CEC via BBC Limassol, since 1/5/77 to GK-Cypriot community in UK, Fri/Sat/Sun 2215-2245 on 9650 7205 (WBI 1/7)

CZECHOSLOVAKIA R Prague ES in EG: 01-02 Am 11990 9740 9540 7345 6055 5930. 03-04 same [no mentn of 01 bc being also to SAs, off the back]. 0730-08 As/Au 21705 17840 11685, 0830-09 same; 09-0930 Sat/Sun same. [R Prague takes a siesta, no xmsns at all 12-14 Mon-Fri]. 1430-15 Af/As 21505 17730 15155 15110 13715 11685 9605. 1530-1625 Eu/Af/As 21505 17730 15165 15155 15110 13715 11990 11685 9605 7345 6055. 1730-1825 Af/As 21505 15110 13715 11990 11685 9605. 18-1830 Eu 7345 5930. 19-20 Eu 7345 5930 incl Sat Christian comment from Czechoslovakia. 22-2230 Eu 6055 1287 (WBI 8/7) Multilingual Interprogramme, one hour later in winter, on 9505 7345 6055 + AM & FM includes EG segments 0530-06 in opening; 0645-0648, 0745-0750; Mon-Sat 0845-0848, 0959-0949, 1045-1052; to Eu/Am on 9740 6055 0030-0055. R Prague total output is 258.45 per week, led by EG 52.20 [not incl multilingual pgm], SP 30.55, FR 27.25 (WBI 8/7)

CHILE R Patagonia Intl, new name, on new fq 6080, addr Casilla 30-D, Coyhaique. Offs & studios at Simon Bolivar 26. Uses 1 kW, xmtr abt 3 km from Coy. Connected w/ARCHI, Cadena Nacional de Emisora [sic]. Owner: Paulo Ojeda Torres. Dir-Tec Luis Ojeda Ojeda. Slogan: R Patagonia Intl, la pionera en Aysen. 1130-04. DX pgm Suns by Carlos Valenzuela Carrasco; QSL if 1 IRC (stn 7/6 to WRTH via DSWCI)

R Universidad de Concepcion, 6135, Casila 2337, Concepcion. Offs & studios at Avenida O'Higgins 1061, 2.o piso. Owner: Univ de Concep. Dir-Gen Carlos Godoy Rocca. Dir-Tec Luiz Grez Saavedra. Xmtr 10 kW at Cerro la Gallina. 11-03. Founded 9/59 (Stn 31/5 to WRTH via DSWCI)

R Nacional de Chile reported 8/7: Chile has asked USSR to apply perestroyka to radio bos to Chile. Neolia Miranda, Chil delegate to UN Info committee, has asked USSR to end provocative and subversive radio pgms in SP to Chile (WBI 15/7) I.e. R Magallanes and/or spl SP syc to Chile (gh)

ECUADOR R Antena Libre, 3240, Casilla 65, Esmeraldas, uses 1 kW. Slogan "La verdad os hara libre" 11-1430 & 22-03. Owner Vicariato Apostolico de Esmeraldas. Dir-Gen Luis Velasco Leon. Dir-Tec Aldo Salvi (stn 31/5 to WRTH via DSWCI)

R Sangay, 3320, addr is Macas, Morona Santiago, Amazonia Ecuatoriana. Sent a surprising verie for 1987 rpt. v/s Proprietario Simon Rivadeneira R. Slogan: Verdad, Paz, y Amor paratodo el Ecuador. Says during one year of existence stn irr due to electricity. Xmtr 1000 W, tho letterhead says 5000, and Ec-made. 45-yr-old Simon is married to Sra Rocio Mantilla. Divides time working at stn and staying in Quito running tourist agency. Secy at stn is Liliana Rivadeneira who also works as contadora and periodista, 22 yrs old (Tor-Henrik Ekblom, Sweden, July DSWCI SW News)

EQUATORIAL GUINEA R Africa, Bata, first obs 5/84,mx and relig pgms in SP & EG. Addr P O Box 441, Bata, or P O Box 851, Malabo. 18-22 on 9550v to Af (WBI 1/7)

ETHIOPIA Monitoring 13-19 June: Test xmsns from V of Ethiopia for EEu 18-1830, WEu 1830-19 confirmed 17-19/6 on 7200; Eth mx, anmts in EG asking for reports to Box 654, Addis Ababa. Ancd xmsns Mon-Thu on 9595 not confirmed 13-16/6 due to severe co-ch QRM (WBI 24/6) Absurd scheduling policy (gh)

FINLAND R Finland reported 25/6: Power failure caused by thunderstorm prevented xmsn of FBC ES last nite. Disruption began in evening and Pori xmtr only opl again after 0500 this morn. Altogether 36h of pgms for abroad unxmtd. And Met Buro forcasts continued Tstorms tomorrow (WBI 1/7) Typical nordic problem

GRENADA Cana reported 4/7: Doubt over future of Discovery TV, which ceased xmsns 19/6 after off1s reported vital eqp damanged by lightning during Tstorm. Trindad unable to repair, so then sent to Miami. Unk when Ch 11, only TV stn here, back on air. Also disagreement between govt and David McCourt, Am who founded nonprofit Discovery Foundation, responsible for setting up stn in late 1988 [sic]. First came to Grenada 2/86 during Reaganvisit and stn mgr Larry Upton said it was Wash's req that McCourt undertook project. Problems w/govt in arranging turning it into public company, extend svc; committee to report by Julyend on final decision (WBI 8/7) Typical carib problem

GUATEMALA R Voz Evangelica de America says it plans to go on SW; listd in WRTH88 as stn 86. No hint on fq or target; MW sked is 1030-06 (stn 31/5 to WRTH, SWN)

<u>GUIANA FRENCH</u> R Japan reported 3/7: R Japan & R France Intl will exchange relays 3 sesquihrs per day from 1/8: R Japan via Montsinery: 02-03 JP 15350 11730; 08-09 JP 5965; 22-23 JP 9685; 0330-04 SP 15350 (WBI 8/7)

RFO Cayenne, 5055, sked *0900-0549* comes in here strong thruout day & nite. Often ment RFO Guyane. No other IDs hrd. Vty of mx, mostly French Carib style like K-dance types, others mainly Am songs, SP songs, occl Braz flavour. If the ancrs talk they can continue for hours. Also phone-in pgms not as interesting as those here (R G Sewdien, Suriname, Suricall via DSWCI SWN)

GUYANA GBC, 5950, sked *0730-0300*was active only in Dec, Jan, Feb. 10 kW on this fq relaying Channel 2, 560 kHz. Audio 1v1 vy low making it difficult to understand pgm. Nx 1530. Veries from secy Phyllis Hyles, Box 10760, Georgetown (R G Sewdien, Suricall, via July DSWCI SWN)

HAITI R Caraibes reported 14/6: today is our 39th anniv; is commercial stn in midst of repairs. Both Haitian Communist Party and US Govt buy air time from us, plus preachers and Voodoo priests. Was hard hit during 2 yrs CNG in power. Eqp destroyed, serious damage. Perhaps by end of July or mid-Aug, will be audible in most remote towns, when 9 kW replaces 1 kW xmtr (WBI 24/6)

HUNGARY Hung R reported 1/7: from today, Kossuth R can be high over megameter radius, from Baltic to Mediterranean, Marseilles to Kiev. 100 kW SW xmtr inaugurated in Szekesfehervar, western Hungary; had been be by Jaszbereny xmtr since 1985 on SW. New xmtr cost 235 megaforints. Will also reach Hungs in Carpathian basin [i.e. Romania]. Has been on 6025 since 4/11/85; old xmtr 20 kW (WBI 8/7)

INDIA Mr H K L Bhagat, I & B minister, says 50 kW SW xmtr will be installed at Trivandrum, to provide quality svc to entire Kerala. But no proposal to install 50kW SW at Kozhikode (Indian Express 6/4 via B Padaki, IDXCI ADXR #98) Annual plan for AIR 1988-89 provides for setting up two 500 kW SW xmtrs at Bangalore for ES; 50 kW SW at Srinagar [KASHMIR], 10kW SW xmtrs at Leh and Port Blair [ANDAMAN ISLANDS] for regional SW, plus numerous AM & FM xmtrs (Deccan Herald 20/4 via B Padaki, ibid)

INDONESIA Antara reported 17/6: RRI will extend bc to ME/Naf/Eu w/new stn to be commissioned next month, says Info Min Harmoko. New 250 kW stn will use various fornlangs besides Indonesian; will be built in Padang Cermin, in the regency of Langkat, N Sumatra, w/French aid worth 8 megafranx (8 gigarupiah), and rupiah funds worth 2.4 giga. Among langs are AR, CM, FR, SP, EG. Pres Suharto says most important thing is radio must give 'colourful' svcs promoting Indo growth & image. He commissiond similar stn in Cimanggis in 1985 aimed at Pac. (WBI 24/6) Uncertain if will actually be on air during July, or someone merely will have dug up a shovelful of dirt as starting point! (Bob Padula, July ADXN) RRI reported 16/7: Info Min Harmoko commissiond new 250 kW xmtr of RRI at Padang Cermin 16/7; aimed at expanding intl svc (WBI 22/7) So doesn't "commission" mean actually go on air?? (gh) But BBCMS shows same old fgs 15150 and 11790 for all VOI ES pgms at usual times, targt given only as As even for German, Spanish—which is now at 17-1730 and 0030—01. Possibly new xmtr takes over fgs from Jakarta site, and likely not w/same fq offset (gh)

Merdeka, Jakarta, reported 15/6: cland TV stn in Cianjur, W Java being tracked down; best reception in Bojang Herang village; on ch 3, 02-09 GMT, mostly repeating pgms carried earlier by TVRI (WBI 1/7)

IRAN VOIRI Spanish ES noted 12/6 0210 on 15084 gloating over Iraq foreign debt. Usual loud, poorly-mod sig. Ancd 0130-0230 WEu 15084//6220=unhrd; 0530-0630 LAm on 15084 9022. 0230 immediatly into AR; had noted usual 9022 SP pgm previous GMT day arnd 2030, so this may have been expl addl svc. Not hrd since in spotty monitoring (Richard Stoller, Canton CT, 10/7)

ISRAEL Jerusalem Post reported 3/7: Except for EG & FR, forn-lang pgms are to 'be removed from daytime slots on Isr R, effective today. Victor Grajewski, head of Isr R ES & bcs to immigrants: pgms for new immigrants are not as effective in daytime as at nite. First thing in morn, people more inclined to tune in HB. Forn lang bcs in 12 langs incl Yiddish, Moroccan Arabic (Mograbi) and Ladino, which together with Hebrew are regard as tradl langs of Jews, begin at 16 and conclude at 19. As for ES, easy HB 22-2225 replaced by Yiddish from 3/7 (WBI 8/7)

 $\overline{\text{ITALY}}$ IRRS plans to be on air by Augestend or Septemberbegin, initially wknds only. $7\frac{1}{2}$ or 10 kW xmtrs w/omni L dipole, Milan. Tests on 7, 9, 13 MHz fgs yet undecided, rpts welcomed (Noel Green, UKOGBANI, July DSWCI SWN) R Earth on it

 $\overline{\text{LTALY}}$ Did you know RAI has an external relay stn? Italian to Eu at 1730-1745, exc Sun 17-1715, both one hour later in winter, are on 1440 via Luxembourg (WBI)

JAPAN From 1/8, RFI via Yamata, all in FR: 10-11 15325 SEAs, 0930-1130 15410 As, 23-0030 15300 SEAs; see GUIANA FRENCH (WBI 8/7) In response, R Japan will revise EG sked: General svc: 01-02 17845 17810 15195 5960=Canada. 03-04 17810 15195 11840 7125=Gabon until 0330. 05-06 17810 15235 11870 11840 9505. 07-08 21695=G 17810 15235 11955. 09-10 17810 11840. 11-12 11815 6120=C. 14-15 11815 11780 9695. 15-16 21700=G 15230 11815 9695 9505. 17-18 11815 11705 9505. 19-1930 11705 9640 9505. 21-2130 11850 11815 9695 9640. 23-24 17810 15230 15195 11815 11800=G. Regional svc: 01-0130 Am 11705. 03-0330 Am 21610 17815 11870. 09-10 Oce 15235 11885 (Toru Yamashita, Asian Broadcasting Institute 18/7 via Tetsuya Kondo)

JORDAN R Jordan AR svc, Amman; during summer time all pgms one hour earlier than: 0330-0730 11920 7155. 0730-0930 11920. 0930-14 11920 9530. 14-15 11920. 15-2330 9520 7155; plus AM & FM. Pgms include The Occupied Land, nx for Isr-occupied terrs, Tue 1215-1245, 1915-1945. R Jordan EG svc is on SW 9560 15-1730 including Jordan Weekly--nx, reviews, ivs, Wed 15-1530; Newsdesk Sun-Thu 17-1730 (WBI 1/7) Contradicting own printd sked recently showing EG from 1230 or so

KAMPUCHEA VOPK ancd 12/7: from 13/7 our radio will add 40 mins to morn xmsn beginning at 2230 daily to be prayers to 3 Buddhist Jewels; on every Buddhist holiday we'll be prayers and blessings in morn, and eve at 1230 a Buddhist sermon. VOPK is now sked 2230-0030, 0430-0630, 11-1430 daily exc Sun when 23-0215, 0430-0645, 11-1445 (WBI 22/7)

 ${
m KOREA\ NORTH}\$ R Pyongyang has changed sked. Some new fqs are 17795 11855 11740 9540. 17795, maybe NK's first 16 mb fq is 06-0650 FR, 07-0750 EG, 08-0850 KR, first notd 6/5 (Hiroyuki Hirao, E Asian DX News of ABI via Tetsuya Kondo) WBI issued a RP sked 8/7 lacking 17795, which makes me suspect it is outdated and gives me the excuse to skip it this time. Totals, however are 355.50 hpw; led by Korean w/70 hpw; EG and JP 64.10 hpw each (gh)

KOREA SOUTH Korea Herald reportd 17/6: FEBC doubles its ouput to 100 kW 18/6 on 1188 kHz, xmtg to NK, China, SU. Initiated in Inchon 23/12/56, FEBC devoted to gospelizing nation and commie block. Late 1970, FEBC caused China to adopt an open-door policy [sic, no ifs, ands, buts about it] The Chinese population of arnd a gigaperson listn to FEBC [all of them???] incl an estimatd 2.5 megaKoreans residing in NE China. Ltrs from Chinese to FEBC stand at 80K since 1979. FEBC is developming mvmt w/Christians in Korea to send pre-tuned radio to 1188 & 1566 during Seoul Olympix.

Yonhap nx agcy reported 21/6: SK plans to recall a VHF channel it has allocated to US Military TV net for more than two sesquidecades in order to set it aside for a new private Korean net. In return, Korea will allow AFKN to begin cable xmsn or offer it a UHF channel. Comm experts and dissidents have long criticised Korn govt for allocating one of the country's four [sic] VHF channels to a forn mily net which has an audience of 41K US svcmen and dependents compared to 40M+ Koreans. SK now uses all 5 [sic] channels, incl one UHF authorised by IFRB for nationwide TVBC, leaving no room for new nationwide net. VHF ch can be sigs nationwide w/out reby unlike UHF, cable (WBI 24/6)

Yonhap nx agcy reported 11/7: SK govt decided to halt anti-NK bcs from 18/7 as follow-up to policies to improve rels w/N. Have been aired by KBS and loud-speakers along DMZ. Slanderous bcs incl prsonal attax on NK leader and son Kims will no longer be aired. Pgms will be persuasive insted of slanderous (WBI 15/7)

 $\underline{\text{LAOS}}$ NRL reported 10/6: Lao-Viet consultations on building TV & RBC stn in Saravane province per memorandum signed (WBI 24/6) KUWAIT LMI

LEBANON R Leb reportd 5/7: PLO has completed establishment of radio stn in Sidon area, beaming bcs primarily to occupied terr. No new Pal stn found so far. PLO's VOPVOPR on 1149 continues 11-15 (WBI 8/7) Al-Fajr, Jersualem, reported 5/7 from Sidon: PLO began test xmsns from radios tn here, called "the Palestine Radio, the PLO Radio", on 1190 kHz MW; 43km S of Beirut, area containing highest concentration of Pals in Leb, some 100 kilopersons. The Palestine R pgm on Syrian R, commented 11/7 that Arafat was irresponsible in setting this up to lure listeners away from Al-Quds R. Monitoring 9-11 July: AR stn IDing as VOP/VOPR hrd f/in abt 1820-1900* on 1190, reflecting PLO views. S/off w/PLO NA, identical anmt to ones carried at end of similar bcs on Iraqi, N Yemeni radios. By the way, top of this item should be attributed to Phalangist V of Leb, not offl govt R Leb (WBI 15/7)

<u>LIBERIA</u> PANA nx agcy, Dakar, reported 8/7: Members of Lib senate concerned over proliferation of private relig stns in country whose pgms are more political than relig. Senators raised concern 7/7 during confirmationhearings of new Dir-Gen for LBS, Alhaji G V Kromah (WBI 15/7)

MALAYSIA RRI Jakarta reported 27/6: RRI and RTV Malaysia have agreed to create an Air Magazine, radio pgm to be aired by both in cooperation (WBI 1/7)

MEXICO R Educacion, 6185, sent f/d form ltr w/pers note in 31 days from v/s Ing. Gustavo Carreno L. Says reving rpts from DXers arnd world, now using 5 kW into dipole, sked 06-01 local (Richard AD Angelo, Wyomissing PA, DSWCI SWN July)

MONGOLIA RUB changed sked since May: 0910-0940 EG Oce, 0950-1050 MG, 1055-1155 Std CH, 12-1230 EG FE, 1255-1325 MG, 1330-14 Std CH, 14-1430 MG, all on 12015 & 9615. 1445-1515 EG SAs 15205 9575, 1940-2010 EG Eu 11870 9575. 21-2130 Std CH on 12015 9615. Fq of FR pgm under investigation (Akira Yamanaka, ABI 18/7)

 $\frac{\text{MOROCCO}}{(\text{not VOA})}$ These stns not incl in WRTH for years: Agadir II on 774 and Sebaa-Aioun (not VOA) on 6190 10 kW, 10-01 (JADX via IDXCI ADXR #98)

Marconi has won contract for 10 x 500 kW xmtrs and aux eqp to be installed at VOA site, up and running by 1992 (Bob Frese, VOA, RA 3/7 via WBI 8/7)

NEPAL RN HS now 7165 ex-3230, 5005. Daily 0015-0445, 0715-1015, 1145-1715. ES in EG 1115-1140 on 5005 only while 7165 comes in w/carrier and tone from 1130 before carrying HS from 1145. ES anmt says "This is the Voice of Radio Nepal" and gives time in NST rather than UTC, a peculiar custom of quite a few extl bcers (Dr Supratik Sanatani, Calcutta, India, 9/7)

NETHERLANDS ANTILLES TWR ancd 27/6: 22/6 2100 TWR dedicated new 500 kW xmtr. We were on airlive from xmtr site to E Carib, NSAm in SP & EG, reports wanted. TWR ancd 29/6: will be testing new-to-us xmtr on 800 kHz 1/7 1330 to find out how we get into the French islands of Haiti, San Martin [sic], Guadeloupe, Martinique w/FR pgming (WBI 8/7) That's the xmtr bought from Capitl R, Transkei

NICARAGUA R Catolica closed 11/7 by Sandinist regime; also threatened to

close R Corporacion (R Impacto, CR, 11/7 via WBI 15/7)
 Monitoring 3-11 July: Since 3/7, V of Nicaragua starting bcs one hour earlier. Now on air 23-06, ex 00-07. SP 23-02 & 03-05, EG 02-03 & 05-06; Mon-Sat only, hrd only on 6100, ancd fg 6015 unhrd (WBI 22/7)

VON reported 16/7: govt suspended El Despertar nx pgm on R Noticias for bcing false info (WBI 22/7)

NIGERIA AFP reprted 29/6: strike by non-editorial RTV workrs has paralysed bc media since 17/6; demand pay increases, replacement of obsolete eqp, better condx of svc. Works, most in engineering, presentation, admn are all members of RTV & Theatre Workers Union, RATTAWU. Stns in Lagos, S Bendel, N Kaduna and Kwara and otherstates failed to bc sked poms, closed down early or went off air completely. RATTAWU gave 21-day ultimatum expiring 4/7. R Nigeria reportd 29/ 6: strike suspended (WBI 8/7)

 OMAN
 R Oman, Muscat, DS in AR on SW:
 02-06 on 17770 11890 6085. 06-08 17770

 11890
 9735.
 08-16 17735 11840 11745.
 16-18 11890 9735 7270.
 18-22 11890 9735
 6085. R Oman has an EG svc on FM 94.3 05-17 incl nx 09, 1030 (WBI 15/7)

Pakislan Broadcasting Corporations BROADCASTING HOUSE, CONSTITUTION AVENUE.

ISLAMABAD PAKISTAH Radio Pakistan current sched for J-88 reads : 0045-0230 Norld Service to SEAs on 15115 17660 0100-0245 Bangla on 11995 15190

0230-0245 Slow Speed News in E to SEAs on 7175 15115 15580 17660 17725

0300-0345 Swahili on 11965 15135

0330-0415 Irani on 9860 12005 0400-0500 Gujrati on 15135 17725 to E & S Africa

0430-0645 World Service to Gulf & ME on 12015 15605 17660

0515-0615 Arabic on 15565 18050

0700-0745 Turki on 6175 7225 to Afghanistan

0715-1105 Nor1d Service to UK on 15606 17650 0715-0815 Burmese on 17640 17890 21475

0900-0945 Tami 1 on 15195 17725

1015-1100 Indonesian on 15565 17640 21475 1105-1120 Slow Speed News in E to W.Eur on 15606 17660

1115-1230 Hindi on 9495 11640

PAKISTAN BROADCASTING 1200-1300 Arabic on 15605 17640

CORPORATION 1230-1445 Bangla or. 11995 15295

1315-1545 World Syce to Gulf & ME on 9475 11615 13675 15605

1600-1630 English News/Slow Speed News in E : to E & S Afr

on 15135 17800 and to Gulf & ME as 1315. (via Noel Green, July DSWCI SW News)

R Pakistan, 3980, cricket commentary in EG 2/4 1430 (Nirmal Chacko, Trivandrum, IDXCI Asian DX Review #99)

Pesna iar

Karachi

PERU From Takayuki Inoue Nozaki's July Relampago DX;

Perú: Radio Nor Oriental, Rodriguez de Mendoza; Según la segunda respuesta de Sr. Luis Elber Julca Llique, gerente de Radio Nor Oriental, fechada el 18 de Mayo de presente año, realmente Radio Nor Oriental salió al aire el 29 de Octubre de 1987 en calidad de prueba y su día de fundación es el 29 de Diciembre de 1987, el mismo día de su cumpleaños de Sr. Luis Elber Julca Llique.

Actualmente Radio Nor Oriental transmite en la frecuencia nominal de los 5270kHz con el transmisor de la marca trujillana "FRANVEL" de 500W de potencia 6 una antena de tipo dipolo de cuarta onda (12 metros de altura), a 0700-2300 en hora local (1200-0400 UTC) diariamente. Este transmisor de onda corta fué instalado en el mes de Octubre de 1987 por el Sr. Franco Velásquez. El precio de este equipo en aquel tiempo fué de 80,000,000 Soles o sea 80,000 Intis, en la actualidad ha variado enormemente, cuesta 150,000 Intis. Como todos saben, algunas emisoras regionales de la Selva y la Sierra de Norte del Perú han obtenido los equipos (consola/antena/transmisor/etc.) desde el "FRANVEL", por ejemplo Radio Libertad de Trujillo (4910.8), Radio Nuevo Continente (5190.6), Radio Huallaga (6364.1), Radio Central de Bellavista (4919.6), Radio Visión (5131.4), Radio Continente (8930V), Radio Nuevo Cajamarca (3970V), etc, las cuales ya visité hace unos años, cuando estaba viajando en la Selva y la Sierra del Norte.

: 1000-1205 on 6070 : 1/00-1500 on 495(:

: 0200-0210 & 03C0-0307 on 5930

0400-0545 & 1345-1700 on 5905

More Peruvian info from the July DSWCI SW News column of Finn Krone:

R HUANCAYO has oficinas at Francisco Masias 575, San Isidro, and studios at Calle Real 517 Of. 403 4.to piso, Huancayo. Proprietario: Roberto Cruzado Solari. Dir.Tec: Ing. Carlos Zegarra. Uses ikw. Slogan: "La Voz del Centro del Peru" (stn 6/6 to WRTH)

6195 R CUSCO, Ap. 251, Cusco, has oficinas y estudios: Saphi No. 601. Transmitter of 1kW located in Saesayhuaman. Slogan: "Radio Cusco - la voz de la capital arqueologica de America". Sch: 1000-0400. F.pl: Increase in power. Dir.Gen: Elena Lizarraga Pacheco-Concha. Dir.Tec: Luis Barreda Murillo (stn to WRTH) think they are still inactive on SW, no?

6324v ESTACION "C" is a small radiostation in Northern Peru. It is situated in Mayabamba, capital of the Departamento San Martin. The station is listed for 6200kHz, but they can be heard outside the 49 m band on 6324 kHz.

Although Moyobamba hs only 22000 inhabitants it is still the traffic and the cultural centre of the region. 70% of the inhabitants lives on farming, 15% from commerce and 15% are employed or public servants.

The station was founded on the 18th September 1981 and first called itself "Radio Moderna". At the time it was using a 50 watt transmitter on SW. Already in January 1982 it acquired a new transmitter GELOSO with a power of 100 watts. The station has always advocated an independent political profile which on 3rd October 1983 led to the closure and confiscation of the transmitter by the army. The reason was that the station director Porfirio Centurion Tapia refused to join praisal of President Belaunde at the time. After some difficult times the station succeeded in getting a transmitter Hiwatt 250 watts, which has been on the air since 7th May 1984. And the station name was changed to Estacion "C".

Since March 1987 a Hiwatt transmitter of 800 watts has been in use. This has been heard on and off overseas. Broadcast hours are 1000-0300 UTC.

Six employees are seing the programmes through the day. Apart from the Director, who is also the owner, another two tecnicians are employed. The record files are quite limited, with 870 singles and 68 music cassettes. 80% of the programming consists of "musica tropical" (chicha). Since app. one year, also an FM transmitter is in use on 97 MHz in Mono using the station name "Doble Nueve". If you happen to hear Estacion "C" and want to send a reception report, it can be sent to the following address: Estacion "C" - La Radio, Jr. Alonso de Alvarado No. 791, Apartado 210, Moyobamba, Depto. San Martin. (Prepared and translated to German by Michael Schmitz in Kurier on basis of information from Ricky Centurion Tapia at Estacion "C". Translated (in part) by your Ed).

9505 R TACNA, Apartado 370, Tacna, has studios & offices Av. 2 de Mayo No. 4 Altos. Proprietario: Radio Tacna S.A. Dir.Gen: Yolanda Vda. de Ca. Dir.Tec: Ing. Alfonso Caceres Contreras. - Uses 500 watts, transmitter location: Pago Aimara s/n. Slogan: "Emisora Decana del Departamento". Sch: Mon-Fri 0900-0000; Sat 0900-0600; Sun 1000-0400. We have increased power on SW from 200 to 500 watts. (stn 8/6 to WRTH) so why don't they mention 6571kHz? 9505 is changed to 9486kHz quite often, ed.

9950N R DEL PACIFICO OSLed with full data letter, specifying 9950 kHz frequency, in 29 days, for mint stamps from v/s J. Petronio Allauca, Dpto. de RR.pp. Accompanying literature mentioning 25th anniversary indicated 4975 & 9675kHz. Address remains Av. Guzman Blanco 465 - Piso 7. Scheduled from 1100-0500 (RAD) also often here in Denmark, best around 2300. Must be harmonic 2x4975, Ed. Letter & schedule in 21 d. V/s: J. Petronio Allauca, Departamento de Raleacionas Publicas (W,Rutsch in Switzerland via PlayDX)

10242 FUTURO LA RADIO, Apartado Postal No. 89, Correo Central Moyobamba is working on increase from 50 to 150 watts. They expect to be on air again in July, 1988. Slogan: "Futuro la Gran Radio orgulto en el oriente peruana". Offices: Barrio Uchuella s/n. Studios: Jr. Grau s/n. Transmitter location: Barrio Calvario. - Proprietario: Wilian Ruiz Gongora. Dir.Tec: Ezequiel Varas S. (Stn to WRTH)

FUTURE PLANS as reported to WRTH by respective stations:

Radio Reloj (1520kHz) plans to go on SW. No mention of freq. and when. Is a member of Radial Andina. Radio El Tiempo in Arequipa also plans SW, no more details. (1440kHz MW)

 $\frac{\text{PHILIPPINES}}{\text{building all the whole foreign sections.}} \quad \text{R Veritas in Quezon City will this year transfer to a new big } /+ \underline{\text{IMI}} \\ \text{building all the whole foreign sections.} \quad \text{(Roland Schulze, GFR, July DSWCI SWN)}$

In Polish, Holy mass on Sundays 13-1355 Eu/Af 7285 6095 1503. Esperanto: 65-06 Eu 7270 6135 5995 1503. 11-1125 Eu 9525 7145. 1530-1555 Eu 7285 6095. 1630-1655 Eu 7285 6095. 2130-2155 Eu 7285 6095 5995 1503. Total output is 298.05 hpw, led by Polish w/89.50, EG 39.05 (WBI 24/6)

Polish R reported 22/6: R Polonia journalists propose a meeting with counterparts at R Free Europe to discuss the latters' 'destructive intentions' in a spirit of openness (WBI 1/7)

PR 4th pgm on numerous AM, FM, LW fqs includes Scouting Radio Stn mag pgm, M-Sa 0650-0750, Sun 1000-1057 (WBI 22/7) Must be what's left of former SW stn Polish Pathfinders (qh)

PORTUGAL RDP Intl reported 20/6: RDP will be investing abt 700 megaescudos this year in improvement of natl cov of xmtrs, modernisation. Impvmt of RDP ES one of priorities for this year, entailing abt 431 megaescudos. Besides concentration of entire ES at Sao Marcal studios, currently being re-equipped and undergoing other modernisation work, a new aerial array for Af bcs is expected to come into opn towards yearend. First semester 1989, plans commission 250 kW xmtr, first of 3 to be purchased, and an aerial array for bcs to USA (WBI 24/6)

ST KITTS-NEVIS CANA nx agcy reportd 20/6 from Charlestown, Nevis: Third radio stn in St K & N began operating at the weekend. V of Nevis has output of 10 kW, on 895 kHz MW. Owned & managed by Nevis BCing Co 1td, backed mainly by Nevisians living overseas. Per informed source, Nevis island admn owns 20% share. Two other stns are state-owned ZIZ 555, which has a studio in Charlestown, and relig R Paradise, 825, owned by Am evangs, relocatd to St K from St Martin in 1970s (WBI 24/6) Nice new MW DX target for NAm

SOUTH AFRICA R RSA ancd 16/6 at 1500: at end of this xmsn we'll bc short comtry in Russian on visit to SU of Archbishop Tutu. Stn doesn't normally bc in RS; did carry short RS comtry at 1550 ending w/invitation to write to R RSA at Intl Press Centre, 76 Shoe Lane, London (WBI 24/6)

R RSA in EG: 02-04 Am 9615 9580 6010. 04-0430 ME/Af 9580 7270 4990. 11-12

Eu/ME/Af 21590 17860 15365 7270. 14-16 Eu/ME/Af 21590 17755 15365 7270 21535. 18-19 Eu 15365 11875. 19-21 ME/Af 9610 7270 4990. DX Corneris sked; Mon 0235 Sun 1835, Sun 1935. Total output 223 hpw, 1ed by EG 59.30 (WBI 24/6)

R RSA fq sked revision dated 17/6: 18-19 15405 11915 ex-15365 11875 (WBI 8/7) R RSA ancd 18/7: From 19/7 at 18 no longr on 15405 but 7245 will be boosted to 500 kW, first choice for Eu listeners; monitored 18-19 on 11915 and 7245 (WBI 22/7)

SPAIN REE Madrid reported 23/6: Plans shortly for TV Espanola to be bc live to whole Am continent by satellite, 4 hpd for 6 months experiment (WBI 1/7)

REE reported 14/7: 13/7, Spain & Costa Rica signed agmt in Madrid for work to begin shortly, possibly this week, on infrastruxure for installation of powerful SW aerial (xmtr) in CR. Spanish investment amounts to some 500 megapesetas, abt 4.5 mega\$. Present at signing ceremony at Spanish Institute of Ibero-American Coop were CR Ambassador in Madrid and Spain Amb in San Jose (WBI 22/7)

SUDAN Omdurman, apparently reactivated 6150, 2120 w/NAf vocals, AR anmts to close at 2145 12/6. Subsequent chex reveal variable s/off, from 2130 to 2215. May replace earlier 5039, 6150 used some years ago I recall (Bob Padula, Au)

SURINAME R Apintie, 5006, sked 08-04. Reception often plagued by strong ute. Most frequently used ID is "Dit is de uitzending van R Apintie op AM, FM, en FM Stereo en special voor het binnenland op de kortegolf in de zestig meterband". Nx at 1730 & 22. Pgms in DT exc 19-2030 Sarnami Hindi, 2030-21 Javanese. During Ramadan they were hrd s/on at 0730 after which pgm in Sarnami Hindi from SRS (600 kHz & 93.1) relayed until own pgms in JV 08-0830. Suns s/off 0300. Pgm most often hrd overseas is Swing Low in Full Stereo, 02-0355 Mon-Sat containing mostly instl mx. ID and IS precedes instl version of NA at s/off. Suns, country mx and classical Eu mx (R G Sewdien, Suricall, via July DSWCI SWN)

SWITZERLAND RNMN reported 7/7 on SRI's use of 17730 at 0130-03: WalterFankhauser, SRI Press Officer, confirms from start of this month SRI has hiredairtime from RBras; from 1/7 for trial period until yearend, one 250 kW xmtr. Not to replace Gabon which just covers CSAm, not CAm. Since Switz is so small, do not expect to find a place for one real SW centre; will have to put one 500 kW in one place, a 250 kW somewhere else, etc (WBI 15/7) 17730 lacks the 0.3 sec satellite delay compard to e.g. 12035 one would expect from 0115, just a reverb/echo apart. How can this be explained? (gh)

 $\underline{\text{TAIWAN}}$ VOFC in EG, some via WYFR: 02-03 As/Au/Am 15345 11860 11740 9765 9680 7445 5985. 03-04 As/Au/Am 15345 11745 9765 9680 7445 5985. 07-08 Am 5985. 22-23 Eu/Au 17845 15440 15370 9955. Also V of Asia xmsns: 02-03 As 7285. 06-07 As 7285. 1030-1040 As 5980 612. 11-12 As 7445 5980 612. 1530-1630 As 7445 5980 612. Total output 439.15 hpw led by Std Chinese 105.35; EG 57.10 (WBI 24/6)

TANZANIA R Tanzania, Dar es Salaam reported 24/6: govt planning to build two radio stns in Nachingwea (SE Tanzania) and Sonea (SW Tanz) to improve reception of radio bcs in country. Jap govt assistance. Two 100 kW SW xmtrs to replace old ones in DeS expected in country in Aug, installation completed by yearend (WBI 1/7) R Tanzania Natl Svc in Swahili: 03-0455 5050 4785. 0455-13 9685 5050 4785. 13-1530 9685 4785. 1530-21 4785. Nx pgms relayed by Zanzibar: 0345-0415, 17-1710, 19-1910. Nx relayed from Zanzibar: 16-1610. R Tanz Commercial svc 13-2015 on 5050 incl nx relay of Zanz 16, by Zanz 17.

V of Tanzania, Zanzibar, in SH: 03-05 & 11-15 & 1815-20 6015; 15-1815 11734.4 and 6015. Pgms include: 0315-0330 Presidents or Chief Ministrs speech irreg, repeat of previous days' 1715 bc. 0345-04 relay RT DeS, 04-0415 nx & comtry relay of RTDeS. 1115-1120 pgm pvw. 12-1210 nx. 1345-14 Sat The World & Events = weekly nx review. 14-1405 nx. 15-1505 pgm pvw. 16-1610 nx relayd by DeS. 1715-1730 Pres or Chief Ministr speech, irreg. 1730-1745 Fri Public Security. 18-1810 nx. 1815-1845 Sun Zanzibar This Week. 19-1910 nx relay of DeS. 1945-20 Nx (WBI 8/7)

 $\frac{\text{TUNISIA}}{15-17} \text{ and } 18-20 \text{ not traced. Fqs have carried relay of TR's DS in AR instead. DS now obs on HF: } 0330-06 12005 9675, 06-17 17610 12005 11550, 17-2230 12005 11550 9675; so ES possibly discontinued (WBI 8/7)$

 $\underline{\text{U S S R}}$ 10670 USB + full carrier, 11/7 0015 not listed in May LN mammoth SSB list. RS pgm to 0028 pause, 0030 chime IS unfamiliar, not Mayak,Ml or Rodina. "Govorit Moskva" and into all-talk pgm. Maybe For Those At Sea listed at *0030

on several fgs? G sig (Richard Stoller, Canton CT)

R Yerevan reported 18/6: We bc to world in AM & Arabic. Summaries of AM xmsns are bc in EG, FR, TK, Persian, SP. For Kurds living in Armenia, there are Kurdish-lang xmsns totalling a sesquihour daily, audible in neighbouring countries too (WBI 24/6)

Kazakh R, Alma Ata, ES in Kazakh, half hours on 5915 5035: 00, 1230, 13, 14, 15, 23. The 1230, 13, 14, 23 are also on 7255; one hour later wintr (WBI 24/6)

At 0550 28/6, the first and Mayak pgms of All-Union R linked up and live coverage from 19th CPSU conference byegan at 0555, hrd on total 51 fgs in UK. WS RM carried live comtry in EG 06-1013, apart from a 30-min interval at 0759, hrd on 31 fqs. Comtries also obs at same time in FR on 14 fqs, GM on 8, CH on 4. SW reception condx during the period were poor (WBI 1/7)

Karelian R, Petrozavodsk, on 765 kHz and FM 02-2103 in RS, FN, Karelian. Was also available on 5065 until late 1983, and on 4780 until June 86 (WBI 1/7) R Dushanbe, ES on 4975 and 1143: Dari 02-03, 1230-13, 14-15, 18-1830 to As;

Persian to ME 1530-16, 1730-18 (WBI 8/7) R Baku, Azerbaijan, ES on 6135 6110 in Persian to ME 0230-0315, 10-1045; Turkish to Eu 11-12; Azeri ME 12-14; TK Eu 14-15; AR ME 15-16; also on 1296 exc 10-1045 (WBI 8/7) Both one hour later in winter

R Tashkent ES in EG: 12-1230 & 1330-14 on 15460 11785 9715 9600 7325 (WBI 15/7)

UAE R, Dubai, SW svc consists mainly of live relays from domestic AR & EG svcs. Relays are sometimes linked w/ES anmts, occl brief mx periods. Nx in EG also frequently accompanied by a short ES feature on Arab history, culture. EG pgms often extended on Fri, Sat, Sun. 0230-04 Am 21700 17890 15435 11940. 0415-.06 As/Au 21700 17830 17775 15435. 0615-14 Eu/ME 21605 17865 15435 11955. 14-1640 17865 15435 11955 11730. 1640-2050 15300 11955 11730 9550. are at 0330, 0530, 1030, 1330, 1630 w/nx (WBI 15/7)

V of the UAE, Abu Dhabi, DS in AR is beamed to other areas on SW: CAm 02-07, As 0930-1530, Eu 0630-1015, 1530-2130, ME/NAf 02-2130: fq usage: 0215 on 11965, 9835 9695 9630 6195. 06 on 17645 11965 9695 9630 6195. 0630 on 17820 17645 11965 11815. 07 on 17820 17645 11815. 0930 on 17820 17645 11940 11815. 1015 on 17645 11940 11815. 12 on 15510 11940 11815. 1230 on 15510 15405 11940 11815. 15 on 11510[sic, means 15510?] 15405 11940 5955. 1530 on 15510 15405 9630 5955. 16 on 15510 15405 9695 9630 5955. 17 on 9695 9630 9595 7280 5995 until 2130. All in AR, nx at 0630, 0930, 1230, 1730, 1930 (WBI 15/7)

U.S.A. Delighted to hear for first time gh's WORLD OF RADIO on WRNO Sat 14/5 at 2330-24 on 13760, as usual loaded w/DX tips. WRNO provides great listening on a very clear channel at 22-24; besides WOR, has USA Top 30 on Sundays; 15/5 0000 switches to 7355, also coming thru fair (Prodyut Banerjee, aboard ship at $18-51\frac{1}{2}$ N, 72-19 E, via IDXCI ADXR 99) Seems this xmsn getting out best to other worldpart too -- Eu, Au. Enjoy 'clear channel' while you can before 13 MHz starts to overload (gh)

URUGUAY R Sport, 6045, addr Eduardo Acevedo 1464/901, Montevideo. Dir-Gen Luis Parodi. Dir-Tec Inq. Ariel Ayphassorho. 1 kW CXA61, xmtr location Av Central s/n.

Slogan: La Pantera. sked 0930-03 (stn 2/6 to WRTH via DSWCI July)

On new 6075, LV de Artigas and R Bella Union alternate pgms. R Bella Union is at Calle Enrique Ferreira 1550, Bella Union, Depto Artigas. owner: Luis Murillo e hijos (Sandra, Solange, Roberto), Dir-Gen Roberto Luis Murillo Ricciardi. Dir-Tec Luis Murillo Miraro. CXA3 5 kW. Slogan: La emisora de la triple frontera de America. Sked 09-04. Answr from R Bella Union, 1250 kHz, says alts w/them and that 6075 is 5 kW (R Bella Union, same owner as LV de Artigas to WRTH 3/6) But a different story from LV de Artigas itself: 2.5 kW, slogan "la primera, 25 anos en el primer lugar", sked 12-20. Dir-Gen Solange Morillo, Dir Tec Victor Ariel Ricci (stn to WRTH) Which is right and which is wrong here? (Finn Krone, DSWCI)

R El Espectador, 11835, v/s is Hugo Magnani Dupetit (Vanhatalo, DXK, SWN)

VENEZUELA R Valera, 4840, Av. 10 no. 9-31, Valera, Edo Trujillo. owner Carlos Rumbos Guerrero. Gerente Marisely Rodriguez. Dir Silinio Perez. Slogan; R Valera ...y Punto. 09-04. V by QSL card (stn 6/6 to WRTH via DSWCI)

Ecos del Torbes, 4980, has oficinas y estudios in Calle 9 No. 8-16. Owner: B Gregorio Gonzalez L. Dir-Tec Ivan Escobar S. Slogan: Su emisora predilecta.

09-04 (stn 7/6 to WRTH)

R San Cristobal expects to start on 9570 w/ 1 kW. Addr: Aprtado 374, San Cristobal, Edo Tachira 5001-A. Oficinas y estudios; 7ma. Avenida, Edificio Brasmatas. Owner: B Gregorio Gonzalez Lovera. Dir-Gen Jose Antonio Loreto. Dir-Tec Alberto Aguilera. Slogan: RSC, la Efectiva. Is on MW 10-04 (stn 7/6 to WRTH, SWN) Written by Ivan Escobar Sanchez, and stamp says Dpto Tecnico / Ecos del Torbes / R Tachira / R El Sol / R S C and he also answered for Ecos del Torbes above. (July DSWCI SWN)

R Los Andes is sporadically active on 6010; if not hrd in Eu, due to low signal; doesn't mean it is not on SW (Jairo Salazar R, DSWCI July)

R Sucesos, 9700, Carrera 4 no. 1-35, Tariba, San Cristobal. Dir-Owner Gelasio A Suarez U, 1 kW, YVTH (stn 3/6 to WRTH) Again listed; anybody know the story? (Finn Krone, DSWCI ed)

VIETNAM R Hanoi [sic] does not often announce target area; so assumed here. 15-min xmsns possibly targetted at listner in China, whilst 30-min bcs to Asia more genrally to SEAs. EG ES of V of Vietnam: 10-1030 15010 9840. 11-1130 9730 7432. 1330-14 15010 9840. 1545-16 & 1615-1630 12035 10010 1010. 16-1630 Af 15010 9840. 18-1830 Eu 15010 9840. 19-1930 same. 2030-21 same. 2230-23 same. 2330-24 same. Total output 197.45 hpw, 1ed by EG 35; Cantonese 29.45; Std CH 26.15; Viet 21 (WBI 1/7)

<u>YUGOSLAVIA</u> During wintr all R Yugoslavia xmsns one hourlater than: EG ES: 1430-15 Eu/ME/As/Au 15415 15240 9620. 1730-18 Eu/ME/Af 11735 7240 6100 5980. 19-1930 Eu/ME 9620 7240 6100 5980. 2115-2130 Eu/ME 9620 7240 6100 5980 1269.

Multilingual svc for Yugos working abroad: Sat & Sun 06-10 on 11735 9620 7240: Sun 06 Sarajevo in SC, 07 Pristina in Albanian, 08 Skopje in Macedonian, 09 Zagreb in SC. Sat 06 Novi Sad in Hungarian, 07 Titograd in SC, 08 Ljubljana in Slovene, 09 Belgrade in SC.

20-2030 on 9620 7240 6100 5980: Sun Belgrade in SC, Mon Ljubljana in Slovene/German/ENGLISH, Tue Zagreb in SC, Wed Sarajevo in SC, Thu Pristina in Alb and 2015 Novi Sad in Hung, Fri Titograd in SC, Sat Skopje in Macedonian. Also Italian from R Capodistria daily 2145-22 on 9620 7240 6100 5980; Pgm for seamen, edited version of R Zagreb xmsn comprising material from various Croatian radios, Thu 22 -2230 on 9620 7240 6100 1269. Total weekly output: 84.30 led by EG 12.15 (WBI 15/7)

ZIMBABWE ZBC Radio 1, Harare, SW usage: 0320(Sun 04) 3396; 0530 (timing varies) change to 6020. 1600 to 3396 until 2200. Pgms include EG nx 04, 05, 06, 08 M-F, 10 M-F, 1115, 14 M-F, 16, 1745, 20. Today at 5, ivs features, financial nx at 15-16 M-F. Newsreel 1615-1630 Mon-Sat. The Struggle Against Apartheid, at 1640-1655 days of bc uncertain but at least Thu. 1715-1745 Tue The Nation, ivs. V of Namibia, SWAPO pgm in EG, AK, Namibian verns 19-1930 M/W/F. 21-22 Sun-

Thu relay of Radio 3.

ZBC Radio 2, multilingual, 0320(Sun 04)on 3306; 05 change to 7175 or 5975; 154522 on 3306; includes nx in EG from Radio 1; and own nx in Shona/Ndebele at many other hourtops. ZBC Radio 4, multiling educ pgm, M-F 0830-1830 on 6045 (WBI 22/7)

CLANDESTINE CRANNY V of the Resistance of the Black Cockerel During monitoring 22-27/6, UNITA stn hos-

tile to govt of Angola ancd this sked: Pgm A: 05-09 9700 7130 (or 9750). 11-15 on 11820, 9650 (or 11930); 18-22 7145, 7130 (or 7225). Pgm B 0330-06 4975. 08-1030 11980, 9600 (or 15167). 12-1430 9600, 15170. 1730-20 4975. Xmsns confirmed at 05-09 on 9700, 1305 on 11820, 0735 on 4975, 1830 on 7145. The 0500 bc includes pgms in PT, FR, EG until 0730, then verns. This EG anmt 0635 27/6:

"Welcome to EG svc of VORBC, UNITA's radio stn. We are boing to you from Jamba the HQ of the UNITA resistance mvmt in Angola. We are on the air every Sunday aftn and evening and on Mon morns. Tune in also for mx pgm on Wed aftn & eve, Thu morn. VORBC gives you a fair, accurate and up-to-date acct of the political, military, diplomatic, administrative, economic and social events in Angola" (WBI 1/7)

<u>V of Oromo Liberation</u>, new anti-Ethiopian radio on 9550, hrd 6/7 1530-1605 in Oromo lang, s/on 7/7 w/anmt in Oromo: "This is the V of Oromo Libn. Listeners, the VOOL is be by the Oromo Libn Front (OLF) every day 1530-16 gmt on 31mb." Xmsn continued at 1535 w/second part of OLF political pgm, listing enemies of the struggle including present Eth govt and sets out the political, economic and social objectives of the OLF (WBI 15/7 & 22/7)

V of the Broad Masses of Eritrea, first obs 11/8/80; ancs in Arabic as V of the Eritrean Masses (Huna sawt al-Jamahir al-Iritriyah). Supports EPLF and hostile to govt of Eth. Claims to be from liberated terr. All fqs vary considerably, up to 30 kHz either side of those listed. Ancs bes in 80, 75, 60, 49, 42, 41, 31, 19 mb. All bes on 14330v, 7485v: 04-05 Tigrigna, 05-0530 Tigre, 0530-0630 Arabic, 0630-07 Amharic, 09-10 Tigrigna, 10-11 Arabic. 14-15 Arabic, 15-16 Tigrigna, 16-1630 Sun /Tue/Thu Kunama; M/W/F/Sa in Afar; 1630-17 Amharic (WBI 1/7)

<u>V of Iraq</u>, tent on 9431.5, 1708-1727 29/5, AR pgming, spoken item mentg Baghdad and Washinton several times. Also mx, 1710 clear ID "Id'hatu sawt-il Iraq". Possibly Syrian outlet? Here for some time now. 1727 jammed, strength 4 (Michael Osborn, UK, July DSWCI SWN)

<u>Iran's Flaq of Freedom Radio</u> Anti-Khomeni Farsi-speaking stn from Egyptian site has dropped 9045. Now 0430-0630 & 1630-1830 on 7080, 15555. Previous names R Vatan, R V of Liberation of Iran, since 1980. One xmtr is more powerful, 15555 (Supratik Sanatani, Calcutta, India, 9/7) This stn ancd during 1630 bc 14/7 that from Sat 16/7 eve xmsn 1630-1820'd be on 11315 insted of 7080 for one week on experimental basis, //unchanged 15555 (WBI 22/7)

 \underline{V} of the Crusader (Mojahed) Closing anmt at 0953 22/6: General pgm of VOM is daily 1600-2000 on 1431 MW, and SW 9580 7130 7180 7220, new 6100, 6175, FM for border residents. Genl Pgm also at 18-20 on new MW fq 1352?/1359. Genl pgm also at 20-21 on 7130, 6175, new 6100. Repeated in morn at 0330, 06, 11 on two other wavelengths, 4259 and 3543 in addn to the above fqs (WBI 1/7)

V of Mujahadeen/Mujahadeen-e-Khalq, pro-Rajavi, anti-Khomeni stn in Farsi *1600 on 7130 3540 after 5 mins of anthem played by symphony orch. Ments "Sedyee Mujahed. Mujahed-e-Khalq". Fqt mentn of "Dushman" (enemy) and also ments TV. Wonder if they are on TV too. Since this stn uses Iraqi facilities, use of TV could be feasible. Pgming noted past 2000. 7130 has bubble jammer which appeared even before stn s/on. MW 1431 obs too in // (Supratik Sanatani, Calcutta, India)

V of National Army of Democratic Kampuchea Stn hostile to Heng Samrin regime, on 5408 has extended its last xmsn by 30 min. Now 10-1530. Strength has improved ever since it moved to this new fq from 5200. Plenty of modern pop numbers in Kampuchean played, following cue from V of Khmer on 6325. Ancrs need to liven up to complete the change. Even then stn has come a long way from rustic programming 2 yrs ago when played long monotonous numbers. Viet and Kamp used and pgms make fgt ment of Vietnam and Hanoi (Dr Supratik Sanatani, Calcutta, India, 9/7)

<u>V of Democratic Kampuchea</u> (Cambodian: Samleng Kampuchea Pracheathipatei) bcs in suport of former Khmer Rouge regime, first obs 16/1/79. Xmtrs believed to be in PR China. In Cambodian: 04-05 17680 15110. 09-10 17533 11870 11780. 13-14 on 9440 6995 6075. 2330-0030 9440 8345 7350 (WBI 22/7)

Echo of Hope has changed sked. 02-05 6348, 09-12 3985, 14-17 3985, 20-21 3985. First noted 17/6 (Toru Yamashita, E Asian DX news of the ABI via Tetsuya Kondo)

TV Marti R Rebelde reported 21/6: Opening of a TV channel being anti-Cuban propaganda from US is being received w/some reservation by certain govt officials and commercial raido stns in Florida, NY Times today cited sources that disagree w/ the project because they fear this may harm their interests and because it might generate difficulties with Cuba (WBI 1/7)

LAST MINUTE INFO CHINA BBCMS provides skeds of regional/provincial stns; showing most sycs carried on SW; fq

usage is subject to some season and diurnal variation. Sked gives overall xmsn times only; usage for individual fqs may vary. Pgms one hour earlier during summer time. [MW & FM portions deleted here -gh]. In order by prov/autonomous re-Fujian: Fujian PBS, Fuzhou, First pgm in Std CH, Amoy, on 5040 4975 2340 at 2050-0557, 0850-1700. Prov nx at 21, 23, 01, 03, 04, 09, 11, 13. Economic nx 2155, 2315, 0345, 0925, 1055, 1130. Press revs 2310, 0110. Gansu PBS, Lanzhou: in Std CH on 6155 6005 4865 at 2150-0130, 0330-0620, 09-16; nx at 22, 23, 0430, 11. Gannan PBS, Hezuozhen in Std CH, Tibetan on 5970, 3210? at 2220-0030, 0350-0550, 0950-14. Guangxi PBS, Nanning in Std CH, Cantonese, Liuzhou dialect on 4915 at 2110-05, 0850-1605; nx at 22, 03, 0430, 1025, 1330. 2nd pgm on 5010 at 2125-24, 0255-0620, 0950-15. Third pgm on 5920 at 2255-0130, 0955-1230. Beihai PBS, Beihai on 8677 at 2215-24, 1035-15. Guizhou PBS, Guiyang in Std CH on 7275 and 3260 at 2155-0030, 0150-16; nx at 23, 02, 0420, 1430. Heilonjiang PBS, Harbin first pgm in Std CH, Korean on 6150, 5950, 4840 at 2050-0610, 0855-1420, local nx at 22, 00, 04, 09, 13; 2nd pqm in Std CH, KR on 4925 at 2055-2330, 0555-1130, 1c1 nx at 0430. Hailar PBS, regional svc, Hailar, first pgm on 3900 at 2150-0005, 0355-0510, 0925-1445. 2nd pgm on 4750 at 2150-2400, 0330-06, 0925-15. Hubei PBS, Wuhan in Std CH on 3940 at 2120-0610, 0850-1540, nx 23, 0230, 04, 09, 10, 1525. Hunan PBS, Changsha in Std CH on 4990 at 21-01, 0320-0515, 0910-1610, [nx at] 2310, 0030, 04, 10, 1030, 1150, 1430. Inner Mongolia (Nei Mongol) PBS, Hohhot, Std CH svc on 9750 6045 3970 at 2130-0530, 0930-15, local nx at 2110, 22, 2335, 02, 0345, 10, 1245, 1455. Economic info at 01, 1045. Mongolian svc on 6974 4525 at 2120-06,

0910-1420. Xilingol PBS, Xilinhot, in Mong on 4950 at 2215-1435. Hulunbeir PBS, Hailar, Std CH svc on 3900 at 2120-0005, 0355-0615, 0925-15; Mongolian svc on 6080 & 4750 at 2130-24, 0330-06. Jiangsu: Jinlin PBS, Nanjing on 4875 at 1155-1605. Jiangxi PBS, Nanchang on 5020, 2445 at 21-1505 in Std CH, local nx at 23, 0230, 04, 07, 0930, 1215. Jilin PBS, Changchun on 6070, 3310 at 2050-0630, 0820-1505, Std CH, prov nx at 21, 22, 00, 04, 09, 1030. Liaoning PBS, Shenyang on 4830 at 2050-01, 0250-0640, 0825-15 in Std CH, local nx at 22, 01, 03, 04, 0430, 0830, 1350. Chifeng PBS, Chifeng on 3930 at 2120-0030, 0310-06, 10-1530. Qinghai PBS, Xining, Tibetan svc on 6500 at 2255-01, 0355-0540, 1025-1355; Std CH svc on 9780, 7260, 4940, 3950 at 2255-01, 0410-07, 0955-1530, nx at 2330, 04, 11, 1445. Shaanxi PBS, Xian in Std CH on 6176 at 2120-0635, 0930-1515, nx at 23, 05, 0940, 14. Sichuan PBS, Chengdu, first pgm in Std CH on 7225, 6060 at 2110-0030, 0320-0630, 0730-1505, prov/local nx at 23, 04=not Sun, 1020=not Sun. 2nd pqm in Std CH, Tibetan, Yi on 5900 at 2150-0530, 0950-1315, prov/local nx at 0030, 10, 12=not Sun. Yunnan PBS, Kunming, First pgm in Std CH on 7210, 4760, 2460 at 2150-01, 0255-06, 0855-1537, nx at 23, 04, 10, 1430. 2nd pgm number one in Std CH, Xishauang Banna Tai, Lahur, Nujiang Lisu, Vietnamese on 5960 at 2155-0330, 1055-1430. 2nd pgm nubmer two in Std CH, Dehong Tai, Jingpo on 6937, 2310 at 2155-02, 1055-1540; Literary pgm on 6035, 3910 reported to 1450. Zhejiang PBS, Hangzhou in Std CH on 4785, 2475 at 2055-0510, 0755-1505, local nx at 21, 22, 23, 01, 02, 04, 05, 09, 10, 14. Wenzhou PBS, Wenzhou in Std CH on 2415 at 2135-0025, 0245-0620, 0840-1248 (WBI 22/7)

Also just in at deadline is East Asian DX News from the Asian Broadcasting Institute, 18/7/88, compiled and translatd by Tetsuya Kondo, Japan::

C H I N A (PEOPLE'S REPUBLIC)

CPBS reported in "News and Press Summary" on June 13 that it's 1st
Program would broadcast news every hour on the hour as from July 4.
But the plan does not come into effect after the renovation of program on that day.

The increase of the 3rd Program on FM is enforced as previously arranged. Now broadcast at 2055-1500. (Isami Hyuga)

Voice of Pujiang is now on the air at 0855-1445 on 4950, 3990 and 3280kHz. Programs in Standard Chinese, according to the program schedule, including Shanghai dialect at 1010-1020, 1200-1210, 1310-We, Fr) and 1400-1410. 1320 (Mo.

In Shanghai this station is also heard on 927, 900kHz. These frequencies are estimated as a Jammer against Taiwan stns. Out of t time period of 0855-1445, CPBS 1st Program is relayed on these frqs. Out of the (Satoru Suga, Isami Hyuga)

A pgm schedule was received from Qinghai PBS. This schedule is effective from Apr. 17 to Sep. 11. 1st Program; 2125-2400 (to 0400 on Su), 0355-0700 (to 0630 on Tu, Th, Sa), 0955-1505 on 9780, 6260, 4940, 3950, 711, 666kHz. 9780kHz is used only at 0355-0700 (to 0630 on Tu, Th, Sa). 2nd Program: 2155-0030, 0355-0600, 0940-1350 (to 1405 on Su) on

3rd Program (FM stereo); 1055-1400. The frq is not shown. as schedule does not mention the Tibetan service. Howeve However broadcast on 6500, 1251kHz. (Hirofumi Yamaoka)

Monitoring observations for Yunnan PBS shows it's broadcast schedale. The following including some presumptions.

Yunnan PBS (4760kHz, may be parallel with 7210, 2460, 990, 576kHz): 2120-2400, 0125-0500, 0755-1440. Std CH.

<u>Yunnan PBS Educational Service</u> (5960kHz): 2130-0245(Sat. 2345), 0830-1445. Including minorities; 2130-2215 Lahu, 2215-2300 Jingbo, 2300-2345 Lisu, 0930-1015 Xishuangbanna Dai, 1015-1100 Dehong Dai, 1100-1145 Lisu, 1145-1230 Jingbo, 1230-1315 Lahu.

Yunnan PBS Literary Service (6035kHz. 3910kHz is now off the air): 2130-0030, 0800-1450. Including Yunnan PBS Vt pgm (2130-2200, 0000-0030, 0800-0830, 0930-1000) and R. Beijing Vt pgm (2200-2300, 2300-2400, 0830-0930).

6937kHz is now off the air.

These readiustments was noted on May 8 by Hiroshi Fujita. Cf. last issue (July LN Page 21). (Tatsuo Gima)

Honghe PBS in Yunnan Province is sometimes on the air on 4930vkHz. Heard till around 1200. This wave is unstable and often disconnected. First noted on Nov. 30 last year without hearing stn ID, however, the ID was cleared up on Apr. 1 as Honghe PBS.

The pgm includes relay of Yunnan 2BS. According to DSWCI Jan. issue, this relayed pgm has been also heard in Nov. by Olle Alm, Finn Krone, Bjorn Fransson.

The letter from this stn in 1985 said that it would start to operate a shortwave as from 1986.

(Akira Shibuta, Akira Yamanaka, Tatsuo Gima)

Nei Menggu PBS discontinued operating 6045, 3970kHz (Std. CH service). and 6974, 4525kHz(Mongolian service). First noted on June 22.
Now only 11705kHz(Std. CH service) and 11865kHz(Mongolian service) are on the air. (Satoru Suga)

A radio stn located in Nei Menggu Autonomous Region has been often heard on 6025kHz since Sep. 26, 1987. The transmission is irregular. The sign on is around 1030-1100 and the sign off is around 1230-1400. This stn has been observed relaying the Mongolian service of Nei Menggu PBS.

However on Oct. 25 last year it was heard to broadcast Mongolian pgms which was not parallel with Nei Menggu PBS, maybe the local pgms. In heavy interference it's ID could be picked up as Alashan PBS.

The channel of 6025kHz is listed in IFRB as Bayenhaote with 15kW wer outlet. Bayenhaote is the capital of Alashan Left Banner, ashan League. (Satoru Suga, Akira Yamanaka, Hiroshi Fujita) power outlet. Alashan League.

Jiangsu PES relays V of Jinling pgm at 1400-1430. The frq is 702 kHz only. This relay service has begun since Feb. 16. (Satoru Suga, Isami Hyuga, Tatsuo Gima)

CCLOMBIA Caracol Bogota, 4755, from 0430 Col mx, 0500 SP nx & ads, 0535 more mx & nx past 0800, strong 12/7; IDs as "Caracol Bogota 4755 kHz" but is probably Emisora Nuevo Mundo xmtr, first hrd in 1969 (Ernie Behr, Ont)

EGYPT R Cairo on 15220, from *2345 AR to 0045*v, vy strong 18/7, //11720 weaker; 17/6 was on 15223.9, but absent some days (Ernie Behr, Kenora, 21/7)

KUWAIT R Kuwait hrd on new 15510, from 2030 AR pgm & NA to 2411*, 14/7; 555 sig, stronger than //15505 & 15495, but 15510 is gone since 18/7; was probably 500 KW ex-9840 which is missing (Ernie Behr, Ont, 21/7)

Official J88 sked for R Kuwait: 6055 0230-2300 AR. 7120 1830-2130 AR. 9750 08-10 Persian, 10-1530 AR. 9840 0230-23 AR. 9880 16-2130 AR. 11665 04-11 AR, 19-21 EG [not 18-??]. 11990 0630-23 AR. 15345 02-05 Koran. 15495 02-05 Koran, 05-23 AR. 15505 07-13 Special AR, 13-18 AR. 17850 04-06 AR. 17885 09-11 AR. 17895 04-0730 AR, 16-18 Urdu. 15345 05-08 EG (Ray Greet, July ADXN)

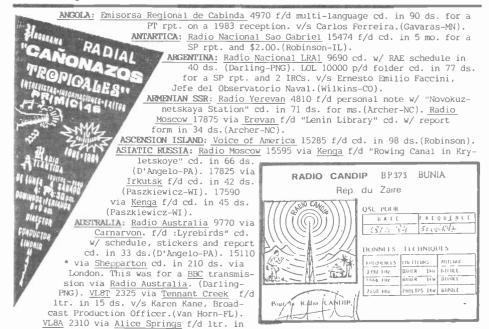
PHILIPPINES FEBC Manila on new 9845, from *1401 RS relig, 1830 UK to 1900*, G 19/6 ex-9800. R Veritas on 11820, from 1300 SAs langs & EG ID to 1425*v, Fair 18/7; RVA hrd on many new & unlisted fqs; can we have their full sked in LN? (Ermie Behr, Kenora Ont, 21/7) If I receive one that's not outdated (gh)

DEFECTIVE XMTRS ON 9750-9755 horrific buzzing noise all June, 0400-1400+ daily, but seems gone since 10/7. On 9655 distorted noise from Habana, no audio 25/6 and other days from 0000. SRI 9885 covered by noise 2100-0600 since mid-June. R Ned Bonaire relay 9590 putting out strong buzz or hum on 9545 & 9635 from 0230; 9715 causing same problem on 9670 & 9760 from 0530; noted since Jan 88 & still there in July. Technical standards of many stns have sunk to an all-time low (Ernie Behr, Kenora Ont, 21/7)

on developments in world broadcasting including: Details of the different programme and frequency schedules. Broadcasting behaviour and technical developments. Activities of clandestine and unofficial broadcasters. For more information write to: Subscriptions Office, BBC Monitoring Service, Caversham Park, Reading, RG4 8TZ, Berkshire, England (BBCMS) Cost is 350 pounds per annum, plus overseas postage (gh)

DX LISTENING DIGEST, gh's own publication in format similar to LN, and with little duplication of input, has just published edition #21, which includes Enjoying Radio, conducted by David Newkirk; some copies of #20, which is nothing but DX news, are still available; samples \$2 each, 10-issue subscriptions \$21 in N America, US funds on US bank or postal money order in US\$. Same rates for REVIEW OF INTERNATIONAL BROADCASTING or both for \$40, only from gh, LN address.

Sam Barto, 47 Prospect Place, Bristol, CT 06010 USA



15 ds. for 1 IRC. (Van Horn-FL). BOLIVIA: Radio San Miquel 3310 f/d prepared cd. w/ ltr. in 85 ds. for a SP rpt. and 1 IRC. v/s Hector Salas Takana, Director. Also received a very nice green pennant.(Schmitz-BRASIL: Radio Marajoara 4955 f/d ltr. in 25 ds. for a PT rpt. and ms. Also rcvd. station stickers. v/s Ronaldo Porto. (Van Horn-FL). Radio Nacional da Amazonas 6180 f/d "Waterfall" cd. in 12 ds. for a PT rpt. and ms. Stickers rcvd. v/s Eudson Monteiro Lima. (Van Horn-FL). Emissora Rural Santarem 4755 form ltr. in 29 ds. for a PT rpt.

Confirmation Card

Dear Sir Charles R. Fox, JR

Your reception report is correct. Please keep on listening our station and writing to us. You can use English ou Portuguese, if you know.

Thank you

Ademir Ribeiro

ZYJ-593 1.270 Khz onda mádia ZYG-761 4.965 Khz onda tropical faixa 60 m



Escatório e Estúdio: AV. DEODORO, 245 Iones 222-0051 e 222-0208 NATAL - FIN - BRASIL

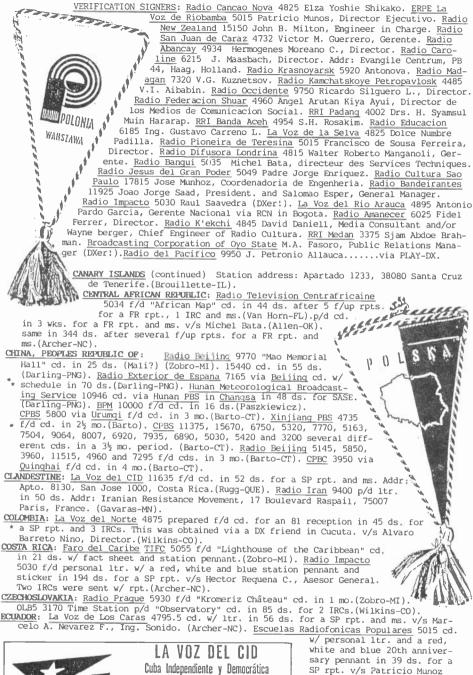
and 1 IRC. v/s Ailton Guerra, Gerente. * (Schmitz-FRG). Radio Clube de Pernambuco 11865 f/d prepared cd. in 6 mo. on my 4th f/up rpt. to the station. This was for an 84 reception.(Plum-NJ). Radio Aparecida 5035 f/d "Studio/Photo" cd. in 35 ds. for a PT rpt. and 1 IRC. (Schmitz-FRG).

BYELORUSSIAN SSR: Radio Moscow 15480 via Orssa f/d cd. in 66 ds.(D'Angelo-PA).

CAMEROON: Radio Garoua 5010 f/d ltr. in 57 ds after 3 f/up rpts. for a Fr/EG rpts., IRCs and ms. v/s James Achanyi Fontem. Also rcvd. verifications from Radio Douala 4795 and Radio Yaounde 4850. (Van Horn-FL).

CANADA: CKFX 6080 f/d cd. w/ baseball sticker and technical information sheets in 13 ds. for 1 IRC. (Robinson-IL). f/d cd. in 18 ds. for 1 IRC.(Paszkiewicz-WI). Radio Canada International n/d "Human Rights" cd. in 18 ds.(Zobro-MI).Radio Japan via RCI Sackville n/d cd. in 17 ds. w/ schedule.(Zobro)

CANARY ISLANDS: Radio Nacional de Espana en Canarias 15365 f/d "La Giralda" cd. in 71 ds. for a SP rpt. and 2 IRCs. v/s Sra. Carmen Baez. Stickers and program information rcvd. direct from station. (over)





Cuba Independiente y Democrática

CERTIFICADO DE SINTONIA

ENGINO R.BUBIN.

QUIEN NOS SINTONIZO EL DIA 2 / SRT1 1988

DE LAS 12:00 GMT, A LAS 12:20 EMISORA: 14 YOU DE CIT EN LA BANDA DE 9940, 1882

Page 28

station sticker in 1 mo. for 2 IRCs.(Robinson-IL). ENGLAND: Voice of America 11760 via Woofferton f/d cd. in 26

EGYPT: Radio Cairo 9745 f/d cd. w/ stamps, postcard and a

Jacome. (Archer-NC).

ds. (Darling-PNG).

BEATLE RADIO

ÇSL

Date:Dec 13,1987. Times:0909-0959 UTC. Freq; 6317.5 KHZ. SINPO; 23342. TX; 200w(approx). ANT; Half wave dipole.

QTH; Ireland.

TO; Gregg Bares, P.O.Box 345 Watertown, CT, 06795 USA.

100% Verification:

V/S DJ Ringo.

EUROPEAN RUSSIA: Radio Moscow 15500 via Moscow f/d "Rowing Canal" cd. in 66 ds. (D'Angelo-PA). same in 52 ds.(Paszkiewicz-WI). 15490 via Tula f/d cd. in 66 ds. (D'Angelo-PA). 17680 f/d "Lenin Library" cd. in 34 ds.(Archer-NC). 15530 via Serpukhov f/d cd. in 66 ds. (D'Angelo-PA). 17625 via Armavir f/d cd. in 34 ds. (Archer-NC).

VERIFICATION SIGNERS: Adventist World Radio 9630 via Moyabi Daniel Grisier. Radio Bangladesh 4890 Md. Abdur Rashid. AIR Kurseong 3355 H.O. Agrawal. AIR Guwahati 3235 N.C. Jain, Assistant Station Engineer. RRI Ujung Padang 4719 H.A. Nyongki. RRI Djakarta 4775 M. Arsyad Subik. RRI Medan 4765 Siam Abdoerrahman, Head of Station. KGEI 11715 Alex Koznetz. Caribbean Beacon 1610 Gareth Hodge. Radio Nacional de Angola 3354 Carlos Ferreira. La Voix du Revolution 3300 Laurent Bikumwani, Directeur Technique....via the German DX publication "Kurier" and Roland Schultze. PADIO NEDERLAND

FALKLANDS: Falkland Islands Broadcasting Station 3958 verie ltr. was rcvd. via BFBS in London from Mike Robertson. He returned my \$1.00: He expressed his dissatifaction with FIBS's verification policy, One disgruntled report for FIBS was forwarded to him from #10 Downing Street! From what he says it sounds like the BFBS will establish their own station on MW there in the Falklands and the FIBS would no longer carry the BFBS programs. Mike sent a great packet of stickers and a station patch. Not guite like the real thing but definately worth the effort. Thanks to Van Horn and Paszkiewicz for the v/s. (Sams)....Great!

FRANCE: Radio Waves International 6271 f/d cds. w/ ltr. and sticker along with station information sheets and a studio tape in 1 mo. for a taped rpt. 50 watts: v/s Peter Hills. (Bares-CT).

GEORGIAN SSR: Radio Moscow 17570 via Tbilisi f/d "Lenin Library" cd. in 34 ds. (Archer-NC).

GERMAN DEMOCRATIC REPUBLIC: Radio Berlin International 15240, 17880, 9730 and 11785 f/d "DX Vocabulary" cds. in 16 ds.(Zobro-MI). 6125, 17880 and 11785 same cd. in 20 ds. w/ pocket calendar.(Zobro-MI).

GERMANY, FEDERAL REPUBLIC OF: Deutsche Welle 6075, 15510, 13790, 6145, 9545, 13780, 6100, 3995 and 15545 several n/d cds. in 2½ mo.(Barto-CT). Sudwestfunk

BADIO STELLA INTERNATIONAL

23 SOUTH RESCHIOOD, EDINBURGH EH12 SYR, SCOTLAND

GREGG BARGS WATERTOWN U.S.A.

This letter confirms your reception of RSI as detailed below:-

0923-1035 loral

Frequency

mats/suggestions.

.7533.KHz.....

150 matts

RST broadcasts to Western Europe via transmittere located in Scotland and is e free radio station.

Frogramming originates from Scotland and transmission normally occurs of the second and fourth Sundays of each month, eingly os 41 and 48 metres respectively.

ASI should next be audible on (see Spring Nevolette)

Reception reports and record requests are always welcome, as are

I trust that our popular music programmes are to your liking and that you will continue to tune is.

Your interest is greatly appreciated and I look forward to hearing from you again. Many thanks for writing.

7265 p/d "Earth" cd. in 1 mo. for \$1.00 (returned). v/s i V. Dr. Krank, Technical Director. (Wallace-MA).

GUAM: Trans World Radio KTWR 9785 f/d cd. w/ schedule in 83 ds. (Rugg-QUE).

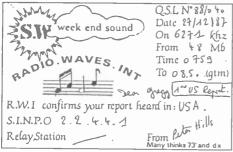
TIVERSU

GUATEMALA: Radio Mam 4825 f/d form 1tr. in 52 ds. for a SP rpt. and 1 IRC. v/s Jose Benito Escalante Ramos, Director. (Schmitz-FRG). Radio Maya Barillas 2360 f/d "Warrior" cd. w/ a red, white and blue station pennant, button and QSL 1tr. This in 93 ds. for a SP rpt. v/s Baltazar Juan, Gerente. (Archer-NC).

HAWAII: WWVH 15000 folder cd. in 25 ds. My 200th NASWA country QSLed: (Schulze-FRG)...Congrats...Sam.

HONDURAS: La Voz de la Mosquitia 4910 f/d ltr. in 78 ds. w/ pennant for a SP rpt. and 2 IRCs. v/s Padre Jose Roldan Brown, Locutor. (Brouillette).

HONG KONG: BBC 15435 n/d cd. in 72 ds. for a rpt. sent to site. (Rugg-QUE).



IRELAND: Beatle Radio 6317.5 via The Scott-* ish Free Radio Network f/d cd. w/ ltr. in 1 mo. for a taped rpt. w/ printed transcript and ms. 200 watts: v/s Ringo stated that this Norwegian based operation has since disbanded.(Bares-CT).

JAPAN: JJY 8000 f/d cd. in 11 ds.(Paszkie-wicz-WI). f/d cd. w/ personal ltr. and a souvineer sheet of Japanese stamps for * \$1.00.(Robinson-IL). NHK 3377.5 via Osaka f/d prepared cd., station cd., and a personal ltr. in 33 ds. after a f/up rpt. for ms. v/s Mr. Hideo Ishida, Radio

Engineer.(Allen-OK).

NOTES: Bill Plum from Flemington, NJ write to say that he is currently starting to DX once again and sending a few follow up reports to some stubborn QSLers. Lots of luck...Sam. Roland Schulze from Germany writes that he has just returned from a vacation in Asia.He was in Sri Lanka and meet <u>Victor Goonetilleke</u> (4S7VK). Roland and his wife also visited Singapore and the Philippines. Wish I was with you! Sam. <u>Gerry Bishop</u> in FL says that DX has been just short of terrible - mostly due to a great deal of line noise. Gerry, do you miss the snow down your way. At least up here I don't have to dodge tornados. Hi:

Richard Davis in NM writes that he was very happy with him recent QSL from Uganda but he was a bit perplexed (as I was too!) with the letter requesting "contributions" from Mr. Lubega. Rich...I also received the same letter with the Japanese forwarding address. Kind of confusing but maybe the American dollar speaks very loud overseas. I kind of figured this would happen after \$ started to replace the IRC...Sam. Also received a letter from a new member Steve Foley in Bronx, NY. He joined the club in April and is getting into the swing of things. Great: Donna Robinson said that she was thrilled with the letter that she received from the FIBS; however, it stated that she should send another report with more details. She sent it to the BFBS in the hopes of a QSL since the original report was very detailed. In the original letter from the FIBS they stated that they consider their QSL to be as valuable as "Gold Dust":

JAPAN: NHK 6005 via Nagoya ltr. in 34 ds. for 1 IRC. (Darling-PNG).

KAZAKH SSR: Radio Moscow 9610 via Alma Ata f/d cd. in 48 ds. after a f/up rpt.(Paszkiewicz).

KENYA: Voice of Kenya 4934 f/d aerogram asking for more rpts. in 1 mo. for 2 IRCs.(Robinson-IL).

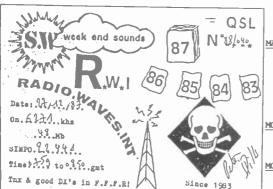
KOREA, REPUBLIC OF: Radio Korea 15575 f/d "Archery - Aiming for the Gold" cd. in 23 ds. w/ schedule.(Zobro-MI).

LATVIAN SSR: Radio Riga 5935 f/d "Komsomolskaya Embankment"

cd. in 115 ds. v/s R. Visnere, Mailbag Editor.(Archer-NC).

LIBERIA: ELWA 11830 n/d "View of ELWA" cd. in 85 ds. v/s J. Tokeh.(MacHarg). MALI: Radio Beijing 11715 f/d "Peihai Park" cd. in 20 ds. w/ site.(Wallace-MA).
MALTA: Deutsche Welle 9585 n/d cd. in 3 mo. (Barto-CT).

MARSHALL ISLANDS: WSZO 4940 p/d ltr. in 388 ds. after a f/up rpt. w/ a tape.(Rippel-VA). p/d ltr. in about 1 yr. v/s Peter Boon. He stated that he recently found several un-



TO. Grags ... BARAS ... TIME. J.O. 15. 9417 ... FREQ. 6312. 5. KYZ. A&mb SW POWER . 250 watt. ANT Centre fed & were dipole answered rpts.(Wallace-MA). p/d form ltr. in 402 ds. for a taped rpt. (Washburn-ME). 6070 personal ltr. in 32 ds.(Schulze).

MARTINIQUE: ORTF 3315 long, friendly personal ltr. w/ a vague verifi-

*cation statement for a FR rpt. and \$1.00 after a f/up rpt. v/s G. Bouchaert, Secretaire de TDF Martinique. Stickers and station information rovd. This was for a 1976 reception.(Sams)....Great: MOLUKU: RRI Ternate 3345 p/d ltr. in 1 mo. for an IN rpt. and ms. This

after 2 f/up rpts. v/s Rusdy Bachmid. (Sams).

MONSERRAT: Deutsche Welle 9565 n/d cd. in 6 wks. (Robinson-IL). 11810 and 11865 n/d cds. in 3 mo.(Barto).



RADIO AUSTRIA

RADIO AUTRICHE

INTERNATIONALE

RADIO AUSTRIA

Perez..... via Roland Schulze and "Kurier"

NEW IRELAND: Radio New Ireland 3905 f/d ltr. in 33 ds. for 2 IRCs. (Robinson-IL).

VERIFICATION SIGNERS: RAE 15345 B. Heyer. RadioBras

Monteiro. Radio Cultura do Para 5045 Francisco

Cesar Nunes da Silva, Director. Radio Nacional Tabatinga 4815 (same as Manaus). La Voz del Napo 3280 Ramiro Cabrera, Director. Radio Halgan 9590 Abdirashid Aden Sad. Radio Atlantida 4790 Ivan Tenorio Matute. Radio Capital 4850 Manuel Correa, Gerente, KFBS 9465 R. Wiens and Joe Sam. Radio TV Luxembourg 6090 Peter Bronclik. ERF Monaco 7205 Marquart and Baum. WHRI 21700 Darelyn van Tassel. Radio Illimani 4945 Carmelo de la Cruz Huanca. ORTN Niamey 3260 Yacouba Alwali. BBC Relay Station Ascension Island 15400 S.M. Wadsley, Engineer. Radio Oman 9735 Rashid Haroon. Radio Panamerica 6105 Daniel Sanchez Rocha. Radio Jesus del Gran Poder 5050 P. Jorge Enriquez. Radio Lira International 15460 David J. Gregory. Radio Free Grenada 15045 George Grant. Radio Mam 4825 Jose Benito Escalante ramos. Educacao Rural 4755 Ailton Guerra, Gerente. Radio San Miquel 3310 Hector Salas Takana, Director. Estacion "C" Moyobamba 6324 Roquilmer Centurion Tapia. Radio Valera 4840 Jose Silvinio

G. Einstoss. Radio Nacional de Manaus 4845 Eudson

PAKISTAN: Radio Pakistan 15115 f/d cd. w/ schedule and ltr. asking for more rpts. in 42 ds. for 2 IRCs. (Robinson-IL). 11639.9, 9495 f/d "Logo" cd. in 1 mo.(Barto-CT). 9465, 15605 and 11615.1 f/d "Broad-casting House" cd. in 2 mo.(Barto). 9475, 9795 and 7365 f/d cd. in 2 mo.(Barto).

PAPUA NEW GUINEA: Radio Simbu 3355 f/d "Map/Logo" cd.
* in 154 ds. after a f/up rpt. for ms. and \$1.00.

v/s Timothy Dickson, Engineering Division. (Davis-NM). Radio Enga 2410 p/d ltr. in 4 mo. for ms.(Allen-OK). Radio Southern Highlands f/d ltr. w/cd. in 73 ds. for ms.(not used) v/s Jack Bata. (Rippel-VA). Radio Gulf 3245 n/d ltr. in 2½ mo. for ms. v/s Timothy Akia, Assistant Manager. (Witte-CA). personal ltr. in 52 ds. v/s Daniel Mailau, Acting Station Manager. (Schulze-FRG). Radio Milne Bay 3360 personal ltr. w/cd. in 2 yrs. for an 86 reception while I was in Bali. (Schulze-FRG)....Gee Roland you got it real tough! Hi!Radio Western Highlands 3375 f/d cd. in 90 ds. for ms. v/s Paul K. Ray, Acting Station Manager. (Van Horn-FL).

NBC 4890 cd. w/ schedule in 139 ds. for \$1.00.(Arland).

f/d cd. in 2 mo. w/ schedules. v/s Timothy Dickson.(Rubin)

PERU: Radio del Pacifico 9950 f/d personal ltr. in 29 ds. for
a SP rpt. and IRCs. (D'Angelo). Radio Maranon 4835 f/d cd.
in 2 mo.(Barto-CT).

PHILIPPINES: VOA Poro/Tinang 15290, 11775, 17740, f/d cd. in 20 ds.(Darling). 11760, 15185 f/d cd. in 22 ds.(Darling). 9770, 11760, 17820, 17740, 15305 f/d cds. in 26 ds.(Darling). 15185, 15425 and 17865 f/d cds. in 29 ds.(Darling). 9725 f/d "Lady Liberty" cd. in 43 ds.(Wilkins). 9760 f/d cd. in 43 ds.(Wilkins). POLAND: Radio Polonia 7270 f/d silver and black "Logo" cd. w/ sticker

And schedule in 60 ds. v/s Miroslaw Lubon, English Section Editor.

PORTUGAL: Deutsche Welle 21680 and 15245 via Radio Trans (Zobro)

Europa n/d cd. in 3 mo.(Barto-CT).



Radio Martí Program

Washington, D.C. 20547

via Edward Rubin

VERIFICATION CARD

We are pleased to confurm your reception of Radio Marif on 19764Y 23, 1988, on 1-935 MHz, at 1430~1445 U.T.C. Thank you for your interest in Radio Marif. We hope you will confunce to enjoy our programs.

José Marf (1853-1895), Cuban poet and essayist, patriot and marry who became the symbol of Cuba's struggie for independence. Marf's dedication to the universal causes of human rights, freedom of expression and dignity of mankind made his name synonymous with bebry throughout Latin America.

RIO MINI: Radio Nacional
5004 f/d cd. in 5 ds.
for a rpt. sent to Pierce
Communications.(D'Angelo).
Radio Africa 9553 f/d cd.
in 5 ds. via the above addr.
(D'Angelo). f/d cd. in 13 ds
(Rugg-QUE).

RWANDA: Deutsche Welle 7225 n/d cd. w/ ltr. in 6 wks.(Robinson). 15270 n/d cd. in 2 mo.(Barto-CT). SCOTLAND: WLR 6317.5 f/d cd. w/ ltr.

* information sheet and station sticker in 1 mo. for a taped rpt. 250 watts: v/s John Dean(Bares-CT). Radio Jashkent Scottand: Radio Stella International 7423 * 6317.5 f/d OSL sheets in 2 mo, for sep



6317.5 f/d QSL sheets in 2 mo. for separate written and taped rpts. v/s Jock Wilson said the transmitters were 150 and 200 watts respectively. Also rovd. personal ltr., information sheets and a studio tape.(Bares-CT)...Great...Sam. Gregg says that these two stations above jointly operate the Scottish Free Radio Network. QSL statements notwithstanding, it is possible the transmitter site(s) may be other than in Scotland. (Bares-CT).

SEYCHELLES: FEBA 15325 f/d "Globe" cd. in 41 ds. v/s Mrs. Doreen Dugasse, QSL Secretary.(Archer-NC).

SICILY: RAI 6060 via Caltanisseta f/d "Garbaldi" cd. in 70 ds.(Rubin-NY). 7175 f/d cd. in 38 ds. for 1 IRC.(Rugg-QUE).

SOUTH AFRICA: Radio Oranje 7285 personal ltr. w/ sticker and a n/d cd. in 114 ds. for 1

IRC. (Robinson-IL).

via Joe Zobro

DADIOEMISODA

CULTURAL

SANJOSE-COSTA PICA

ILUMINANDO

EL SENDERO DE LA VIDA

1002710-

SPAIN: Radio Exterior de Espana 6125, 9360, 9630 and 15365 (Canary Is.) f/d "Plaza de Espana" cd. in 42 ds. for a SP rpt. (Brouillette-IL).

SPANISH MOROCCO: Radio Medi Un 9575 cd. in 5 wks. for a FR rpt. and \$1.00. Sticker and schedule were rcvd. (Sams).

SULAWESI: RRI Kendari 4000 p/d ltr. in 41 ds. after a f/up rpt. in IN for ms. v/s H. Sjahbuddin, BA. Addr: Jalan Laute No. 44, Kotak Pos 7, Kendari 93111, Sulawesi Tenggara, (Allen-OK).

Dear Listener,
Thank you for your Report
This confirms that you were listening to NBC, on 2 3/3/88 at A ET.. // 00.-///.3. G M.T This Transmitter is located at Fort Moresky and operates on 4890 khz, . 6.0., metres

Power . 1.0. KW. Triadic array aerial system. REMARKS, VIA EG RUDIN

EDWARD, The station you leard is our regional Service which is located in the Carital of PNG PUT MOTESTY

POST CARD I have checked your Toport with our station log and confirmed that 400 did Lestened to NBC. Please find enclosed our Carrent Programme Sauca Schoolule for your information.

Kind regards Timothy Dickson ENGINEERING DIVISION

SUMATERA: RRI Palembang 4856 f/d "Trad-

itional Houses" cd. in 70 ds. for an IN rpt. and ms. v/s Drs. Abdul Rochim.(Allen-OK). RRI Jambi 4927 f/d form ltr. in 5 wks. for an IN rpt. and ms. v/s H. Ali Amran. (Sams). RRI Padang 4002.8 f/d personal ltr. in 19 ds. for an IN

rpt. v/s Drs. H. Syamsul Muin Harahap, Kepala Stasiun. (Archer-NC). RRI Sibolga 3241.5 p/d ltr. in 35 ds. * after a f/up rpt. and ms. (Allen-OK). RPDTK2 Labuhan Batu, Rantau Prapat 3804 p/d personal ltr. in 3 wks. after a f/up rpt. in IN for ms. v/s Khairat Anwar Nasution, Station Announcer. This was for 81 and 82 receptions. Station is now on 3880.(Sams).

SWEDEN: Radio Sweden International 15390 and 21690 f/d "Stockholm in May" cd. in 12 ds. Sticker rcvd. v/s A. Sjoblom.(Zobro-MI). 17770 via <u>Varberq</u> f/d cd. in 15 ds. for 2 IRCs. (Brouillette-IL).

SWITZERLAND: Swiss Radio International 9885 and 13685 f/d cd. in 2 mo.(Barto-CT). (Robinson-IL).

TANZANIA: Radio Tanzania 9684 f/d cd. in 67 ds. for 2 IRCs. URUGUAY: Radio Monte Carlo 9595 f/d form ltr. w/ stickers in 145 ds. for a SP rpt. v/s Ana Ferreira Bonino. (Archer-NC). USA: KUSW 15225 cd. w/ sticker and schedule in 35 ds.(Schulze).

VENEZUELA: YVTO 6100 p/d cd. in 50 ds. for a SP rpt. v/s Cn. Pedro Pablo Leon, El Director. (Archer-NC).

VIETNAM: Voice of Vietnam 15010 f/d cd. in 97 ds.(Rugg-QUE). ZAMBIA: Radio Zambia 9580 f/d cd. in 31 ds. for 3 IRCs. v/s W. Lukozu. (Wilkins-CO).

Thats it for this time. I left out a few reports near the end but they will all be in the next column. Best of DXing and QSLing.....Sam.



Distributing Editor: John F. Henault, 55 Lincoln St., Abington, MA 02351

The following folks made this issue of FRENDX possible:

John ANYWODI, Lexington, VA
ROWLAND ARCHER, Raleigh, NC
Kevin ATKINS Birmingham, AL: Icom R70; Collins R390A
Richard D'ANGELO, Wyomissing, PA
Peter DILLON, serving with the U. S. Forces in Greece: Radio Shack DX400
Richard ECKMAN, San Jose, CA
Kurt ENKENHUS, Silver Spring, MD: JRC NRD515
Rufus JORDAN, Pittsburgh, PA: Radio Shack DX302, Zenith Transoceanic
Chuck RIPPEL, Virginia Beach, VA: JRC NRD 525; Icom 761
Jim STREITMATTER, South Bend, IN: Panasonic RFB300
David SWARINGEN, Huntersville, NC: Kenwood R5000; Panasonic RF2200
Ron TROTTO, St. Cloud, FL
John TUCHSCHERER, Neenah, WI: Icom R70; Yaesu FRG7700
Terry WEINHOLD, Denver, PA: Yaesu FT-ONE

and me, John M. Kapinos, Shrewsbury, MA: One 1.75 liter jug of Tanqueray, One 12 ounce bottle of Canada Try Tonic Water and One very small lime along with a very large thirst

***** IMPORTANT NOTE ****

I will be away on a trip beginning August 11. Thus the deadline for contributions for the September FRENDX witll be August 10. Arrangements have been made for the material to be mailed to the editors on August 11. If this early deadline is inconvenient, you may of course send your contributions directly to the column editors. Thank you for your patience and understanding in this matter

John Henault, the regular editor of this column, is recuperating, albeit slowly, from the injuries he suffered in his May 7 accident. It now looks like it will be some time before he is able to resume his regular NASWA duties so keep sending your contributions to me until furthur notice. It is safe to assume that I will remain as "guest editor" until at least the December issue of FRENDX.

The summer doldrums have certianly stricken, but we broke a record this month. Every single contributor not only cut their loggings into strips but also sorted them in ascending frequency order. For this I thank you very much.

Kevin Atkins came up with the excellant suggestion that any Editor who has access to a FAX machine mention such in his column. Great idea Kevin. I might add that any Editor with Electronic Mail receiving capabilities might also mention same.

To those who don't regularly read our "Awards Page", we'd like to mention that we have the NASWA Country List and Awards Booklets available for \$2.00 postpaid in North America and \$3.00 via Air Hail elsewhere.

Our congratulations to the following folks who were presented Awards at the recent ANARC Convention in Orange County, CA:

North American Short Wave DXer of the Year: NASWA's own Tom Sundstrom International Short Wave DXer of the Year: Finn Krone

Specialty Band DXer of the Year (TIE) : Ernest Coop

: Ernest Cooper and Robert French

Broadcaster of the Year : Ray Briem of ABC Talkradio

It was again our pleasure to serve as ANARC Awards coordinator this year.

Till next month

4851



Well, a funny thing happened on the way to the ANARC convention..or so the story goes. I was involved in an auto accident in California and missed the festivities this year. My head cracked the windshield of the rental car we were using. I could have told the doctor my head was hard, hi!! A rather light turn-out this month so let's get to it....

- 2485 AUSTRALIA. ABC Katherine. 0912. EE. Sports reports, ID at 0915, and talk about local TV programmes. (21/6 Trotto-FL)
- 3235 PAPUA NEW GUINEA. R. West New Britain. 1013-1033. Usual mix of local music and U.S. pop's. YL w/ ID. (11/6 Atkins-AL)
- 3250 HONDURAS. Luz y Vida. 0400. Soft IF by male annor with announcement of all broadcast freq's. (26/6 Trotto-FL)
- 3260t PAPUA NEW GUINEA. R. Madang. 0930-0950. Hymne. (12/6 Atkine-AL)
 3285 BELIZE. RB. 0434. Reggae music, OM DJ with talk. (26/6 Trotto-FL)
 3325 PAPUA NEW GUINEA. R. North Solomans. 0945-1000. Mix of MOR and
- island music. ID and news @ 1010. (15/6 Atkins-AL)
- 3330 RWANDA. R. Rwandaise. 0255-0335. VN/FF. Here most night's lately. IS starts around 0255, then instrumental NA @ 0259. YL annor in VN ar 0300 followed by 0M in FF at 0302. (25/6 Archer-NC)
- PAPUA NEW GUINEA. R. New Ireland. 1050-1105. Male DJ w/prog of 3905
- pop's and local choral music, ID. (18/6 Archer-NC) PERU. R. Wuaria. 0250-0310. LA songs with ID. (21/6 Tuchscherer-WI) 4700
- PERU. R. Atlantida. 0945. Andean music. (10/6 Anywodi-VA) 4790
- ECUADOR. Paz y Bien. 0951. Religious pgm. (10/6 Anywodi-VA) 4819 4830
- VENEZUELA. R. Tachira. 1003. S/on w/anthem by small chorus, freq anmts, then salsa mx. (12/6 Anywodi-VA)
- MALI. RTVM. 0557. Harp IS, march-like NA, ID per WRTH. Then into 4835 African vocals. (16/6 Eckman-CA)
- INDONESIA. RRI Ambon. 1025-1100, Music-some piano, island type 4845 lagu, even a latin tune on trumpet. ID. (18/6 Atkins-AL)
- 4850 DOMINICAN REPUBLIC. R. Clarin. 0320-0420. Music pgm, mostly of pop standards, OM with ID. (28/6 Jordan-PA)
- COMOMBIA. LV del Cinaruco. 0305-0403. LA vocals, CARACOL ID's, TC @ 4865 occasional DJ chatter. 0400 ID and S/off anmts.(11/6 D'Angelo-PA); @ 0041 with lively pops and ID's. (17/6 Jordan-PA)
- INDONESIA. RRI Wamena. 1053. Vocal music. Possible news. Fade at 4871 1109. (25/6 Atkins-AL)
- 4885 BRASIL. R. Clube do Para. 0353-0403. Vocals to ID and S/off anmt by OM. Carrier cut w/ no anthem. (5/6 D'Angelo-PA)
- 4890 PAPUA NEW GUINEA. NBC Port Moresby. 1030. EE BBC pgm interspersed w/ more local talk by YL. (10/6 Rippel-VA)

Well I said a light turn-out and I meant it!!!! Let's do a bit better next month. Until then, 73 and CHEERS !!!!!

mila



Editor: Jerry Berg, 38 Eastern Avenue, Lexington, MA 02173

Slim pickins this month . . .

5010 MADAGASCAR Tananarive, hi-life mx at 0315 on 6-7, talk by M&L. ID at 0330; fair signal (Atkins-AL).

5030 COSTA RICA R. Impacto, nice mix of US pops and ballads on 7-1 at 033%, many "Impacto" ID cut-ins, anmts, TCs, fqy annomt, possible nx at 0300; fair-good sig (Jordan); back at full strength at 1040-1100 on 6-30, good signal, no sign of harmonic on 10060 (D'Angelo-PA).

BRAZIL R Cultura do Para, in PT at 0415-0432 on 6-25, Brazilian pops, EG ID at 0416, ". . . R. Cultural, 5045 kHz, tropical wave, in the 60 meter band . . . Box 5045 0416, ". . . R. Cultural, 5045 kHz, tropical wave, Para, Brazil." PT ID 0418, more pops and IDs (Archer-NC). 5045 kHz, tropical wave, in the 60 meter band . . . Belem,

ECUADOR R Nacional Progreso, LA mx at 0257 on 6-26, TCs and talk between selections 5060

to 0308 s/off ID, anmts and NA; no QRM, but poor signal (D'Angelo-PA). INDONESIA Tent. RRI, Sibolga, 1045-1115 on 6-19, soft pops to 1059, then SCI to 5256 1100, man with Jakarta nx, pops again after the nx. No IDs but definitely SCI. Jakarta-4775 in well. Man in Indo also hrd on 4000.3 at 1032, faded rapidly after 1034--Kendari? (Archer-NC).

5567.3 COLOMBIA R. Nueva Vida, religious talk at 0143 on 6-29, mx at 0157; no clear ID at 0158*, QRN (Tuchscherer-WI).

CZECHOSLAVAKIA Prague at 0300-0345 7-5, nx on Iranian shoot down, sports, Czech 5930

folk mx, all EC; 0320-0345 6-9, "Scrapbook" prgm, also EC (Swaringen-NC).

CANADA R. Japan over RCI, good in EC at 0105 on 6-28, talks on economics, food prices, talk about India (Levison-PA). 5960

USA VoFC over WYFR, EG 0209 6-28, talk on athletics, good signal (Levison-PA). 5985 GFR presumed. DW in Turkish at 1702-1725 on 6-9, fair sig with world nx, current 6000

affairs, rpts on Turkey, India; ID (Dillon-GREECE). BRAZIL R Gaucha, 0824-0857 6-6, frequent IDs, ad, 0830 pips under ID, long talk 6020 features, also pips at 0845 during interview segment; open carrier covered fqy at

0856 (RN?). Poor sig overall (D'Angelo-PA). ARCENTINA R. Nacional, 0813-0902 on 6-18, poor signal with mix of rock vocals and 6060 anmts to 0829, ID, fqy, TC, anmt by man, live prgm of Argentine folk mx; 5+1 pips at 0900, noticias by gal (D'Angelo-PA).

6090

LUXEMBOURG R. Luxembourg, in EG at 0055-0115, pops (Swaringen-NC).

ASCENSION IS. BBC relay, *0015 on 6-25, good signal, IS, ID by man, beamed to
Latin America; chimes, wx, all Spanish (Trotto-FL). 6110

CUBA Havana, talk about NATO, USA, pop mx, in EC 0235 7-5 (Swaringen-NC). 6140

SOUTH AFRICA R. RSA, *2300 on 6-24, good signal with IS, ID by man, SP nx, another 6140 ID 2303 (Trotto-FL).

BRAZIL R. Nacional da Amazonia, PT speech at 0902 6-16, applause, later two men anners with fast talk, IDs, TCs and lively Brazilian vocals; good signal (D'Angelo-PA). 6180

CYPRUS BBC relay, in EG at 1355-1410 6-12, Beatles "Help," nx summary, rock mx 6180 request show, fair, //15070 (UK) (Dillon-GREECE).

With this issue, yours truly is hanging up his phones as LR-B editor, after eight years at the typewriter. Hopefully this will give me a little more time to spend at my "other" hobby job, the Committee to Preserve Radio Verifications. I am happy to be passing the baton to an experienced DXer (and friend) as LR-B's new editor, Sheryl Paszkiewicz, 1015 Green Street, Manitowoc, Wisconsin 54220-6231. Sheryl has been a long time supporter of Log Report, and we are fortunate that she has agreed to take over.

CPRV is going very well. The Committee was established a year and a half ago as a committee of ANARC, with the goal of saving from loss or destruction those QSLs belonging to hobbyists who have passed away or given up the hobby. Our material is kept at WCSN's Boston headquarters. So far we have managed to save nearly 12,000 QSLs that were probably destined for the trash. Some of this material goes back to the 20's, and belonged to some of the great names in the hobby, like August Balbi and Paul Kary. We handle MW and utes, plus amateur (only especially distinctive pre-1950 amateur stuff, please), as well as SWBC. If you know of any QSLs that could use a new home, let me know.

Thanks for your support over the years. Now, over to Sheryl . . .



Editor: Jerry Ervine, Box 5204, Hidaigo, TX 78557

- 6248 VATICAN Vatican R. 1432-1450 POLISH Rel. mass, ID by priest during homily. f. //9645 g.// 11740 f./qrm (Dillon-GREECE 6/12)
- 6995 CUBA CLX-Casa Blanca 1852 SP yl/wx, off abruptly @1857* carrier ?CFL-ed-7? SIO-444 (Trotto-FL 6/16)
- ALBANIA R. Tirana 2330-2357 EG nx, ment. Israel & Persian Gulf. 7065 Albanian pop mx; (Swaringen-NC 7/4)
- 7140 CYPRUS BBC Relay 1531-1600 AR tk abt Ramadhan, mod AR mx, list of names & countries, pen pals; ID. vg. (Dillon-Greece 8/15)
- ALBANIA R. Tirana 1615-1630 AR class. mx, opera; ID, tk @OPEC, 7205 Amer. imperialism; NA. vg. Dillon-Greece 6/9)
- YUGOSLAVIA R. YUGOSLAVIA 1630-1655 AR IS, ID, wld nx by om, emtry 7240 abt socialism. AR mx. f. (Dillon-Greece 6/9)
- GERMANY presumed. 0120-0136 GM om, yl DJ's w/EG rock. Ments of 7265 Baden-Baden, usb cuts ham QRM; (ARCHER-NC 6/19)
- 7355 USA WRNO 0150-0210 EG 'The Jazz Show'/ D.Sanborn; (Swaringen-NC 9022 IRAN VOIRE 1545-1605 RS yl tk abt wld affairs. ID. f. (Dillon-Greece 6/10)/ 2345 PERSIAN om tk, ID, tk/nx, class. mx. ID. // 15084. SIO-434. (Trotto-F1 6/22)
- 9220 KOREA, DPR R. Pyongyang 1525-1547* AR tk abt rev. Korean people, ID byom, NA, S/off. (Dillon-Greece 6/15)
- 9435 ISRAEL KI 2300 EG (Weinhold-PA FT-ONE)
- 9445 TURKEY VOT 0301-0320 EG rev. of Turkish press; 6/9 / 2230-2245 The Armenian File', mx pgm; (Swaringen-NC 7/4)
- EGYPT R.Cairo 0320-0329* EG wld nx, NA, s/off; (Swaringen-NC) PHILTPPINESFEBC 0958 AMOY (pres) ID, IS [TNX RH for tip] SIO-232 9475 9495
- (Anywodi-VA 6/19) PHILIPPINES R. VERITAS 0954 UNK. ID, freq, mx. SIO-222 (Anywodi) 9505
- 9509 ALGERIAR. Algerienne 0566 FR yl ancr, mx, ID, nx. SIO-434 (Trotto 9540 MADAGASCAR R. Neth. 2113-2125 EG 'Air Time Africa pgm, interview
- of Ed of 'African Guardian', Media Echoes pgm.ID(Enkenhus-MD 6/17 9575
- ITALY RAI 0100-0120 EG Accordian mx, LA jazz. f. (Foell-LA 6/23 9610
- USSR RM 0230-0245 EG Soviet life, science & eng.ex.(Foell-LA) YUGOSLAVIA RY 2114-2155 EG/FR IS, ID, pgm. QRM (Enkenhus-MD 6/18 9620 9640
- USSR R. Kiev 0200-0210 EG nx, cmtry on Pentagon.f (Foell-LA 6/22 LITHUANIAN SSR R.Vilnius 2209-2220* EG om & yl tk abt local 9640 rally by perestroika initiative. g. (Enkenhus-MD 6/27)
- 9655 ECUADOR, HCJB 0616 GM/FR DX pgm. time pips, ID into French. frequency not listed in RTH or 88 Database.SIO-444(Trotto-FL)
- 9660 VENEZUELA R. Rumbos 2340-2350 LA mx, ID by om, mx, SIO-232 (D'Angelo-PA 6/5)
- MEXICO XEQQ La Q 1213-1242 SP BBC IS from 1210, fade. Pops, 9680 promos, om ancr, canned ID. de Mexico City, more pop mx (Archer) TURKEY TRT 2230 EG Turkish press; (Weinhold-PA 6/7)
- 9685 SWEDEN RSI 0245-0257 EG Orch. mx by Karl Ni:sson (Swaringen-NC) 9695
- 9725 SWITZERLAND SRI 0200-0215 EG wld SW nx, cmtryon PLO (Foell-LA)
- 9750 USA, ALASKA KNLS 1542-1605 EG Pop mx, ID's, freq. om & yl ancrs (Tuchscherer-WI 6/28)
- UAE VouaE 0238 AR Q'ran, tk, 6 time pips, anthem, nx (Atkins-AL 9835 HUNGARY RB 0133 EG DX news items. SIO-434 (Levison-PA 6/17) 9835
- NETHERLANDS RNW 0252 EG .Part II of highlights from EDXC con-9895 vention in Antwerp, Belgium. This channel only audible in HI during winter. f. (Park-IL 6/2)
- BELGIUM BRT 2100-2125 EG 'Brussels Calling' press rev. re.Wx 9925 and Rock festival featuring Sting, Inxs. (Swaringen-NC 7/4)
- 9900 EGYPT R. Cairo 1900 GM Chimes at hour, ID by yl ancr. Tk, into Egyptian. pgm, ID. SIO-343 (Trotto-F1 6/22)
- 10060 COSTA RICA R. Impacto 0020-0034 SP Pop vocals, om w/ID, mx, ID, 'Typewriter Song'. nx, SIO-454. Pos. harmonic of 5030 or new freq. GN's LN reports pennant showing 5030-July FRENDX(D'Angelo
- 11550 TUNISIA RTT 2202-2220 AR nx, mx, yl ancr,prayers, ex(Tuchscherer 11685 <u>SAUDI ARABIA</u> BSKSA *0357-0425* Lang. Unable tp // 15060, lc1
- QRN, IS, s/on w/stringed instr. and AR melody. 5 time pips, ID in Lang. Q'ran, closing w/ cmts, NA. (Streitmatter-IN 6/14)



Editor: Wallace C. Treibel, 357 N.E. 149 St., Seattle, WA 98155

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11700
           DOMINICAN REPUBLIC R. Mil in SP 2159, ID's, TC, ads, nx, presume this is old
           R. Clarin xmitter, f-g (D'Angelo PA 6/7) ED: See also p. 23 LN in July FRENDX.
11750
           SINGAPORE BBC relay in EG 1445, tennis match from Wimbledon (Tuchscherer WI 7/1)
           BULGARIA R. Sofia in EG 0335, country on EG lang & love, g (Levison PA 6/26)
11750
11760
           NORWAY RNI in EG *0355, repeated ID's & IS prior to s/on, f (Streitmatter 7/3)
11788
           INDONESIA V. of Indonesia in IN/FR 1241-1333, pop mx, ID in EG 1300, then into
           FR pgm with W DJ (Enkenhus MD 6/18)
11810
           IRAQ R. Baghdad in EG 0133, mideast mx, ID at 0152 (Tuchscherer WI 6/9)
           JAPAN RJ in EG 1501, nx, ID's (Tuchscherer WI 7/1)
11815
11900.
           NO. MARIANAS KYOI Saipan in EG 1409, Chris. Sci. Mon. pgm, nx (Tuchscherer 6/22)
11905
           ITALY RAI in EG 0350, Govt. debate on sale of F-16 to IT (Streitmatter 6/19)
12005
           TUNISIA R. Tunis in AR 1515, AR mx w/live audience, ID 1600 (Dillon GREECE 6/20)
12035
           SWITZERLAND SRI in SP 2130, intl nx, ID 2138, exc (Swaringen NC 7/4)
12045
           NEW ZEALAND RNZ IN EG 0350-0500+, pop mx, tlks, "Art Calendar", big band mx, ID,
           TC, BBC pgm followed, f (Jordan PA 6/5)

ISRAEL Kol Israel in EG 2320, pgm on nutrition & dental care (Swaringen NC 7/4)
12080
           UNITED KINGDOM BBC in EG 2245, sports roundup (Swaringen NC 7/4)
12095
          KIRIBATI R. Kiribati in lang. 0958, discussion on subject of broadcasting?, roll
14802usb
           call voice vote (Anywodi VA 6/13) s/off ancmts & NA 1059 (Rippel VA 6/10)
150097
           VIETNAM VoV in EG 1900, ID, IS, nx, p due to severe intermit. noise (Anywodi VA)
15055
           TAIWAN WYFR via VOFC in EG 1325, relig tlk, "Open Forum", f (Anywodi VA 7/2)
           UNITED KINGDOM BBC in EG 1532, "The Pleasure's Yours", nx (Dillon GREECE 6/9)
15070
15140
           CHILE R. Nacional in SP 1247, sports news, ads, ID's, nx, mx (Enkenhus MD 6/21)
15165
           DENMARK RD in DN 1723-1731*, nx magazine pgm, ID in DN/EG 1730 (Enkenhus 6/17)
          IRAQ R. Baghdad in EG 2030, nx, mx, g-exc (Porinchak OH 7/3)
LIBYA V. of the Great Arab Homeland in AR 1220, AR mx, ID 1225, patriotic songs,
15230
15235
          home service ID 1230 after bells, Mideast nx, vg (Dillon GREECE 6/12)
15310
          NORWAY RNI in EG 1901, nx, contrys, g (Levison PA 6/5, Weinhold PA 6/5) ED: As
           far as I can tell, RNI xmits in EG only on Sundays each week.
           CANARY IS. REE Spain relay in SP 2148, IS, NA, ID, nx, mx (Streitmatter 5/30)
15365
          USSR R. Rodina in RS *1900, IS, ID, nx?, QRM from REE (Trotto FL 6/26)
15375
15400
          FINLAND RF in EG/FN *1300, ID, nx, country, IS (Streitmatter 6/7) in EG 1355
           "Learn Finnish" pgm, toll free phone no. given (Swaringen NC 5/22)
15420
          CYPRUS BBC relay in EG 0545, ID, chimes IS, "The World Today" (Trotto FL 6/21)
15430
           SWITZERLAND SRI in FR 0605, nx, ID, QRM from 5, nx, ID, co-channel QRM from
          unid. Arabic sta which dominated the freq., p (Trotto FL 6/21)
HONG KONG BBC relay in EG *2300, time pips, ID, world nx, f (Anywodi VA 6/13)
15435
          EGYPT R. Cairo in EG 1318, AR lang lesson, moved fr 17675, f (Anywodi VA 6/22)
17595nf
17595
          MOROCCO RIVM in FR 1557, pop mx, nx, then back to mx (Tuchscherer WI 6/22)
          USSR RM (Dushanbe?) in EG 1052, mx, ID, "News and Views" (Enkenhus MD 7/3)
17680
17725
          PAKISTAN RP in EG *0230-0245*, slo EG nx, ID's, //17660, 15580 (Jordan 6/7)
           in Gujrati 0357-0445, "Call to Prayer" chants, pips, nx?, AR mx (Jordan 6/5)
          SWITZERLAND SRI in multi-langs 0100-0230+, Swiss mx, FR to 0200, then into EG, world nx, cmntry, tlks, tourist info, //6135, 9725, 9885, 12035 (Jordan 6/21) CMAN R. Oman in AR 1450, chants, ID 1501, nx (Tuchscherer WI 6/18)
17730
17735
17770
          CMAN R. Oman in AR 0157-0330, mournful recitations, tlks, AR vocals, heavy
          dramatic orch wks, flute IS, low modul w/QRM frm KVOH 17775 (Jordan PA 6/14)
17795
          AUSTRALIA RA in EG 0140, mx selections & vocals, g (Levison PA 6/25)
17845
          TAIWAN WYFR Family Radio via VOFC 2240, vocals (Weinhold PA)
          UNITED ARAB EMIRATES R. Dubai in EG/AR 1621, class mx, ID in EG then into nx,
17865
          into AR 1641 (Tuchscherer WI 6/22)
17875
          QATAR QBS in AR 1409-1449, Mideast mx, chants (Tuchscherer WI 6/18)
17890
          UNITED ARAB EMIRATES R. Dubai in EG 0330, ID, nx, cmntry (Streitmatter 5/29)
21500
          PORTUGAL R. Liberty in RS 1300, nx, ID 1307, cmntry, f-g (Anywodi VA 7/2)
          UNITED ARAB EMIRATES R. Dubai in AR 0504, nx?, anthem, AR mx (Jordan PA 6/5)
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Light turnout this month. I guess the weather's too hot to stay indoors during these dog days. As in the past, I did not repeat any loggings that were published in the previous month's FRENDX. Please consult the July issue for a more complete update.

It was a total surprise to find messages on Pinelands on July 21 from Bill Cole and Robert Horvitz saying "Congratulations. You have been awarded the 1988 ANARC NA DXer of the Year Award...". It indeed is an honor and it is much appreciated. Thanks to the NASWA administration for the nomination, and to the ANARC club representatives and the ANARC officials!!!

The Pineland RBBS will be offline for one to two weeks commencing mid-August. It is vacation time. I cannot afford to leave it on line and risk damage from thunderstorms travelling through the area.

In early July RBBS Netmail and Echomail was implemented on the Pinelands RBBS. The system is growing very quickly. Participating nodes already include one RBBS in Holland. Messages entered at your local RBBS are mailed each night through the network to other RBBSs. As there are more than 100 topical echos, not all participating RBBSs will carry all echos. On this board, among the two dozen or more echos I have chosen to carry are SHORTWAVE and HAM. The SHORTWAVE echo ties into the echos carried by the other well-known SWL oriented boards: Neverboard, ANARC/ACE, etc. Another door now available is a FLEA market door, similar to the FORSALE download directory described last month. Both can be used to sell, buy, swap or look for equipment. You can enter the MAIL area and FLEA market through the [D]oors command on the MAIN command line.

Another relay has popped up. Noted from mid-July, Beijing announces 15455, 15290, 15180, and 11860 at 03 UT to WNA. The Mali frequencies 11715 and 9770 were not mentioned, yet they were heard in parallel when I checked on the 21st and 27th. Compared to 15455 and 15180 direct, the audio delay on 11860 -- an excellent signal -- is short, perhaps a half-second. The delays on the Mali frequencies are considerably longer. The usual ENAto-NA Spanish relay at 05 on 9690 is not being heard. Has this been dropped, or did it move? Jonathan Marks, although he was out of work with a bad case of the flu and a loss of his voice, did leave a note on Pinelands that 11860 is no doubt a new relay from Spain.

I picked up an M-7000 in early July and have been having fun poking around the utility bands. If any NASWA member dabbles in this stuff, I would be interested in any current press schedules ... thanks.

Thomas R. Sundstrom PO Box 2275 | MCI Mail: 244-6376
Vincentown | The Source: BCF811
NJ 08088-2275 | Compuserve: (send via MCI Mail)
Packet Radio: W2XQ @ WB2MNF

Telex: 6502446376 (via WUI)

| Pinelands RBBS: 609-859-1910

SF AIR RADIO 5547, 5574

WEATHER	REPORTS 6683
Record Last Updated	05/21/88 05/12/88 04/10/88 05/07/88 05/07/88 05/17/88 11/12/37 04/20/88 05/12/88 05/12/88 07/14/88 07/14/88 07/04/88 07/04/88 07/04/88 07/04/88 07/04/88 07/04/88 07/13/88 07/13/88
Notes	Sun-Mon 11715, 9770 v Mali Eng Mon only 90 deg 20 deg also other freqs Morid Service Su Eng & Span 9735 v Malta
ise sq Target Area	As/Pac/PapNG NA Americas Ind/Pakis/NA/SA NA regional Americas NA/CA/SA NA/CA/SA NA/CA NA/CA NA/CA NA/CA NA/CA NA NA/CA NA NA/CA NA
CHEDULES: By Start Frae Sundstrom, W2AQ Freq Freq Freq Freq #5 #6 # 7 #8	15180
ENGLISH LANGUAGE SW BRDADCAST SCHEDULES: BY SI Compiled by Thomas R. Sundstrom, WZKQ Freq Freq Freq Freq Freq Freq Freq Frec	7795 17750 15375 15320 15240 15160 5455 11715 9770 8655 5080 11605 9435 6090 5160 15115 8140 9620 8180 9630 8982 5475 11730 11710 9865 9765 8975 81750 1775 9729 81750 9740 9630 9540 7745 6055
Cospi Cospi Freq F	17795 9755 15455 1810 12080 6090 15160 11880 9852 7355 1545 11910
Station	R Australia R Canada Int'l R Beljing R Havana R Baghdad Kol Israel R Luxembourg R Pyongyang R Pyongyang R Norway Sp Foreign Kadio MCSN MHAI MRNO R Norcow ÜKF HGB B Bdapest R Budapest R Rudapest R Ratican Radio R Australia NKC R Australia OK R Australia OK R Australia OK R Australia OK R Peace R Perague R Prague R Berlin Int'l R for Peace R Prague
) Country	Australia Canada China Cuba Iraaq Iraaq Iraaq Iraaq Iraaq Israad Norway Ccaudor Norway Austria Austria Austria Costa Rica Cos
Start End Time Time (UTC) (UTC)	0000 0100 0000 0100 0000 0200 0000 0200 0010 0110 0100 0120 0100 0120 0100 0120

All Records included

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	06/05/88	03/19/88	04/10/88	5/17/88	04/26/88	04/23/RB	06/10/88	00/16/80 04/16/80	12/11/02	05/10/00	27, 37, 50	00/11/00	05/21/00	00/12/00	02/02/00	11/15/07	10/01/21	05/01/88	04/20/00	78/20/60	0750770	08/02/00	07/08/88	78/06/20	/21/88	04/20/88	05/19/88	03/07/88	06/05/88	04/18/88	05/14/88	23/88	05/13/88	03/07/88	95/18/87	05/21/8R	03/14/58	30/88	06/06/87
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	0300	0320	Fed Rep Sermany	R Deutsche Welle	11785	9700	5096	9545	6045	9109		NÁ
	0300	0345	Serwan Dew Rep	R Berlin Int'l	11785	9620						HWG
	0300	0425	Guatemala	TENC	3300							
	6300	0400	Japan	R Japan	21610 17825 17810 15195 11870 11840	17825	17810	15195	11870	11840		60S/Asia/NA
	6300	0430	Netherland Antilles	Trans World Radio	9535							AM.
	0300	0400	Taiwan	V of Free China	15345 11745	11745	9765	0895	7445	5985		NA/Jap/As/AusNZ
	0300	0320	Turkey	V of Turkey	17760	9445						SE AS/NA
	0300	0200	USA	MOSM	9815							Canada
	0300	0400	USA	WHEI	7400	7355						Eu/CA/SA
	0300	0090	USA	MEND	6185							NA/CA
	0300	0020	USSR	R Noscow	9640	9610	0096	9530	7296	6170		ENB
	0310	0327	Switzerland	Red Cross	12035	9885	9725	6135				MA/CA
	0310	0330	Vatican State	Vatican Radio	6150							MA
	0315	0325	France	R France Int'l	11995	11700	11995 11700 11670	0086	05/6	9550	7175 71	7175 7135 Am/Afr/Ind/As/Eu
	0330	0400	Albania	R Tarana	9500	7065						MA
	0330	0430	England	HBC	6175	5975						Morld Service/NA
	0330	0400	Sweden	R Sweden	11705							끭
	0330	0415	United Arab Emirates A Dubai	R Dubai	21700 17890 15435 11940	17890	15435	11940				NA
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	0345	0730	New Zealand	R Wew Zealand Int'l	15150 12045	12045						Pac/Aus/Melanesia
	0350	0410	Italy	RAI	15330	5330 11905	9710					S As
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<u> </u>	0400	0200	Australia	R Australia	17795	17750	17715	15320	15240	15160 1	1945 119	.7795 17750 17715 15320 15240 15160 11945 11910 As/Pac/PapNG/Afr
	0400	0430	Austria	DRF	15410	9875	6155					ME/WNA/Eu
	0400		China	k Beijing	11980	9645						ANN
	0400	0090	Cuba	R Havana	9770	9655	6140	9035	5965			Americas
	0400	0415	Israel	Kol Israel	17630	12080 11605	11605	9435	9610			Aus/As/WA/Eu
	0400	0425	Netherlands	R Nederland	13700	9820						ME/E Afr
	6400	0450	North Korea	R Pyongyang	15180	15180 15160 15115	15115					SE As
	A.86.A		1	200	11740	0,50						ME/F Afr/BNA

04/20/88

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Su/Mo to 0530 NYFR: 9765,5985 04/20/88

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09/07/87 06/05/88 02/01/88 11/12/86 05/31/88

news in English

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6140 to 0450

Eng Mon only

ME/E Afr/WNA

Afr/NE

9510 6155 5990

1940 11830 9885

R Norway R Bucharest

7270

12035 9870

R Swiss Int'l

Radio RSA

South Africa Switzerland

Romania

0455 0426 0430 0090 0090

0400 0400 0400 0400 0415 0425 0430 0430

Norway

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forld Service

Mediterranean

Eu/CA/SA

R Pakistan R Tirana

Pakıstan

0645 0440 Austria

Albania Italy

FE.

NE/WWA/Eu

5410 9875 6155

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11/12/87	06/05/88	04/18/88	05/21/88		06/05/88	05/19/88	04/24/88	04/18/87	04/23/88	05/28/88	05/17/88	02/15/88	03/07/88	_		10/11/86	09/19/86	12/14/86	06/05/88	04/28/88	11/12/87	05/21/88	07/04/88	02/01/88	03/28/88	05/20/88	07/20/87	03/16/88	04/20/88	02/15/88	06/05/88	12/24/86	05/21/88	03/16/88	04/18/86	98/61/60	05/09/87	11/13/86	04/22/87
9510 S				via Spain!maybe ran-	6120 v Antiqua				Eng Mon only	~		70 dea	**	v UK exc 9750, 6140			via Bonaire			v UK exc 9750, 6140				9640 Carib				60 deg		20 deq (Se only)									Sat-Sun 0700-0830
World Service/NA	SACAE AFr	ME/E Af/Eu	As/Pac/PapNG	END	AN.	Af/ME/Eu	605/As/NA/Oceania	Far E/S&E 4s/Aus/N2	Eu/NE/Afr	Aa/605	4	Canada	Afr/Eu	Eu/Afr/ME	SE As	Eu	#NA	Afr	Far E/Aus/As	Eu/Afr/ME	World Service/NA	17795 17750 17715 15315 15240 15160 11945 11910 As/Pac/PapNG/Afr	Americas	World Service/NA	Eu	SE As	SE As	Eu	Eu/CA/SA	NA/CA	W Afr	Eu	As/Pac/PapNG/Afr	il Eu	Eu/W Af	W Afr	Afr	Pac	Eu
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		Finland	Australia	China	Fed Rep bermany	German Dem Rep	Japan	Kuwait	Norway	South Korea	Spain	USA	Vatican State	Canada	Serman Dem Rep	Czechoslovakia	Wetherlands	Romania	Arab Emirates	Canada	England	alia		England		orea	Teiwan	USA	USA	USA	Sermany		Australia	Bulgaria			Switzerland		Ecuador
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0430	0430	0430	-0500	0200	0200	0200	0200	0200	0200	0200	0200	0200	0200	0515	0515	0530	0530	0230	0530	0545	0545	0090	0090	0090	0090	0090	0090	0090	0090	0090	0615	0630	0630	0630	0630	0630	0630	0645	0650

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0070		0730 Australia	R Australia	17750 17715 15240 15160 9655 5995	As/Pac/PapNB	
0020	0830	Ecuador	HCJB	9745 6130	S Pac	
0700	0060	Guam	KSDA	17855 11700	As	
0070	0080	Japan	R Japan	21695 17810 15235 11955	60S/As/Aa/0c/Eu/ME	21695 Gabon relay
00/0	1115	Pakistan	R Pakistan	17660 15605	Eu	World Service
00/0	0800	Taiwan	V of Free China	5985	U.S.	Via WYFR
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0715	0730	Vatican State	Vatican Radio	. 15190 11725	Africa	
0730	0080	Australia	R Australia	17750 17715 11720 9655 5995	As/Pac/PapNG	
0730	0080	Austria	DRF	17870 15410 11915 6155	ME/Eu	Su 0715-
0730	0080	Czechoslovakia	R Prague	21705 17840 11865	S&E As/Pac	
0730	0825	Netherlands	R Nederland	9715 9630	NZ/Aus	via Bonaire
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Worth Korea

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1900

5510 11695

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Canada	China	Guas	Sweden	Serman Dem Rep	Hungary	Anetralia	aria ina	pelgium pelgium	Fed Rep Sermany	India	Israel	Norway	Switzerland	USSR	Vietnam	Ecuador	Hungary	Wetherlands	New Zealand	Jaiwan	United Arab Emirates	Switzerland	O Australia R Australia	China	England	Finland	Serman Dem Rep	Suam	Japan	North Korea	South Africa	South Korea	Sweden	Switzerland	Switzerland	Jaiwan	USA	USA	
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	Sat -1400/Sun -1332	Slow-speed news				Su -1230	04/18/87	17800,15410 v Kigali		21480 & 15560 v Madg 02/23/88	Mon-Fr1		Sun		via Japan	17715, 15110 v Mali		Mon-Sat		Su only		45 deg	20 deg (Su only)	9600 v Cuba									Eng news	news in English				11750 t 9740 FE	Sun to 1355
	NA.	Eu	Africa	As/Aus	6080 As/Par/PapNB	ENA/Aus/As/Eu	Americas	W Afr	SE As	Eu/ME/As	WA/Carib	FarE/Jap	WA/Carib	6060 As/Par/PapNG	SE As	ENA/SE As/S Fac	Americas	A.M.	As	44	As	E Canada	NA/CA	World Service	Αs	Afr/As/Aus/NZ	As	냋	5995 As/Pac/PapN6	Eu	S As/E As	SE As	N.A.	Am/Afr/Ind/As/Eu	SE As	As/Pac/PapWG	WNA/SE As/5 Pac	Morld Service/NA	NA
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15010 12010	15345 11815	17660 1	21485 1	11855	11800 11705	17870 15320 11915	11746	21600 17800 17765 15410	21540 21465 17880 15440	21480 17605 17575 15560	17820 11855	6075		11800	17710 15385	17715 1	17890 1	15400 11945	11980	17890	17720 15280	5980	9715	17820 17645 15530 15320 15225 13680	11785	21485 17865 17840 15190	17595	15240 11705	9770	17876 15525	21690 15190	17800	15630 11645	21645	21540	9710	15455	11775	15400 11945
V of Vietnam	Trans World Radio	R Pakistan	Vatican Radio	R Tirana	R Australia	DRF	HCJB	R Deutsche Welle	R Berlin Int'l	R Wederland	R Canada Int'l	HCJB	R Canada Int'l	R Australia	R Canada Int'l	R Beijing	HCJB	R Finland	KSDA	AWR Africa	R Bucharest	MCSN	WRND	R Moscow	R Tashkent	Vatican Radio	R Cairo	R Berlin Int'l	R Australia	R Bangladesh	R Sweden	V of Turkey	V of Greece	R France Int'l	R Berlin Int'l	R Australia	R Berjing	BEC	R Finland
Vietnam	Wetherland Antilles	Pakistan	Vatican State	Albania	Australia	Austria	Ecuador	Fed Rep Germany	Sersan Des Rep	Wetherlands	Canada	Ecuador	Canada	Australia	Canada	China	Ecuador	Finland	Suam	Ivery Coast	Komania	USA	USA	USSR	USSR	Vatican State	Egypt	Serman Dem Rep	Australia	Bangladesh	Sweden	Turkey	6r eece	France	Serwan Dew Rep	Australia	China	Eng] and	Finland
1130	1257	1130	1130	1200	1200	1200	1200	1200	1215	1225	1300	1235	1500	1230	1229	1300	1600	1225	1400	1300	1230	1400	1400	1300	1225	1215	1330	1300	1300	1300	1300	1300	1243	1255	1330	1330	1400	1345	1325
1100	1110	1115	1115	1130	1130	1130	1130	1130	1130	1130	1158	1158	1159	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1215	1215	1230	1230	1230	1230	1235	1245	1245	1300	1300	1300	1300



05/31/88	07/04/88	04/18/88	03/16/88	05/15/87	03/26/88	-		05/21/88	11/14/87	03/28/88	11/12/87	05/01/88	04/20/88	02/22/88	04/10/88	05/20/88	08/29/87	06/05/88	05/28/88	05/19/88	04/20/88	03/16/88	05/31/88	03/07/88	11/12/87	04/16/88	12/24/86	05/21/88	02/21/88	04/25/88	67/20/87	11/15/86	05/19/88	05/13/88	01/03/88	07/64/88	04/10/88	04/20/88
11840 v Cuba						last 4 via Fir relave					15260 5			M/W-1620, Th/Sa-1640	21700 v Gabon							20 deg	11840 v Cuba			M/Th						Eng news		Slow-speed news 1615 05/13/88	-		11705 v Sabon	
World Service	As	ME/Eu	A fire	S&E As/Pac	S&E 45/Eu	CLE Eu	SE As	As/Pac/PapMG	S Asia	LA	Morld Service/NA	SACRE AFF	India	India	805/As/Am/Eu/ME	Eu	As	As	ME/Afr/605	As	Eu/CA/SA	NA/ER	World Service	As/Aus/NZ	World Service/NA	Eu	Afr	As/Pac/PapN6	9605 Afr/As	ME/E Afr	SE As	MA.	Af/Eu	ME/Eks Afr	Africa	E&S Afr	Afr/ME/As/W Eu	India
15530 13680 12055 11840	17645 15580 11890 11775 11655	17800 15185 11755	15310 11846 11735	21505 17730 15155 15110 13715 11685 9605		17820 15325 15315 11935 11915 9555		9580 7215 7205 6080 5995	15165 11600	15460	15260 11750 9740 9515	21600 17810 11965 9735	11816 11700	9820	21700 11815 9695 9505	11740 9625	15215 9770	17745 17720 15335 15256 11940 11775	9870 5575	9750	21655 15105	11965	13660 11840	_	11750	-	9480		11990 11685 11665	~	7445 5960	17565 15630 11645	17775 15255 9730 7295	17800 15605 15135 13675 11615 9475	17730 15126 11816	(11660) 9570	17795 17620 15360 11705 6175	11760
В Мозсом	R Stn Peace & Progress	R Finland	R Sofia	R Prague	R Weder Land	R Canada Int'l	R Berlin Int'l	R Australia	R Beijing	AWR Latin America	388	A Deutsche Welle	KSDA	KTWR	R Japan	R Pyengyang	R Veritas Asia	R Bucharest	R Korea	KNLS	#HKI	NEND	R Moscow	Vatican Radio	388	R Budapest	R Tirana	R Australia	A Prague	R Swiss Int'l	V of Asia	V of Greece	R Berlin Int'l	R Pakistan	Vatican Radio	R Beijing	R France Int'l	KSDA
	USSR	Finland	Bulgaria	Czechoslovakia	Netherlands	Canada	German Dem Rep	Australia	China	Costa Rica		Fed Rep Sermany	Buss	6ua#			Philippines		South Korea						_				_	٠.	Taiwan	Greece		_		- 1		Guan
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1400	1400	1405	1430	1430	1430	1445	1445	1200	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1515	1515	1530	050	1530	1530	1530	1540	1545	1545	1545	8	1600	1600

	04/23/88	03/07/88	07/20/86	5/31/88	04/10/88	2/20/87	02/15/88	04/10/88	04/17/88	05/31/88	05/28/88	06/05/88	11/12/87	05/19/88	02/27/88	08/17/87	03/26/88	05/13/88	07/04/88	0/28/87	07/04/88	04/24/88	04/10/88	05/20/88	02/07/88	05/28/88	04/21/88	07/04/88	12/03/87	03/16/88	04/17/88	07/04/88	04/23/88	05/19/88	06/05/88	05/14/87	05/19/88	02/27/88	03/16/88
K	g Sun only (n-Fr1	best later in xmsn 07	50	`	70 deg 12		04	90	11840 v Cuba 05	05	90	11	90	Mon-Sat 02	90	03	World Service 05	0.5	10	20	90	64	02	Eng Sun only 02	90	04	8/1428 07		20 deg 03	04	8/14429-9/1 07	0.4	02	90	05	0.5	02.	03
NOT EVROF	S AS/WNA/AF/NE/Eu	India/ME		Eu/Afr		Canada	S Afr		T.	World Service		Aus/As	Morld Service/NA	S As/Eu	Afr	S Afr	S&E AFr	显	Af	盄	E&S Afr	Eu	605/As/Am	E	WNA/Afr/Eu/ME	Eu	Eu	Eu	Eu/CA/SA	NA/CA/Eu	Eu	Rf	Afr	Eu	Z	Eu/Afr/ME	ME/S Afr/Eu	Eu	P\$-
MORINIAG - PACIFIC, NOT EUROPE	15310 15180	15245	1 9720	17865 15435 11955 11730	11735	15225	21640	9465	21615 21525 15440	11840	15010 12016 9645	21680 17825 15510 15105 9745 7200 6170	15260 9515	11780 11915 6115 5545	21810 17595	15255	9540 6020	11570 9400	15140 13615 12030 11775 11670 9630	15265	11600 9570	+-14	11815 11705 9505	11740 9625	15310 15220 9655	15575	6065	7210	15105	15420	17845 15545 13740	17830 15525 15430 11955 9865	15205		9480 7155	15345	12010 11825 11915 6155 5945	11695 5916	15310 11840 11735
MO	R Workay	a]	BC Serv of Kingdom of SA 9720	s R Dubai	KCBI	KUSW	MCSN	WHIK	WYFR	В Моссом	V of Vietnam	R Deutsche Welle	386	DRF	PKI	R Cairo	R Nederland	R Pakistan	R Stn Peace & Progress	R Bras	R Beijing	Kol Israel	R Japan	R Pyongyang	R Norway	R Korea	R Sweden	Red Cross	WHRI	WEND	WYFR	Red Cross	VDA	R Berlin lot'l	R Tirana	RAE	ORF	BRT	F. Sofia
	0 Norway	0 Portugal		O United Arab Emirates R Dubai		0 USA	O USA) USA	USA USA	O USSR) Vietnam	O Fed Kep Germany	5 England		5 Velgium) Egypt	Netherlands) Pakistan	USSR USSR) Brazil	China China	i Israel) North Korea							ush ush		₽ USA) German Dem Rep	Albania .	. Argentina	Austria	Relgium	Bulgaria
	1600 1630	1600 1630	1600 2100	1600 1640	1900 1900	1600 1900	1600 1800	1600 2000	0021 009	1600 1800	1600 1630	1610 1650	1615 1745		1630 1655		1630 1725	1630 1900	630	25	200										1700 1800		1710 1730	1715 1800	1730 1800	1730 1825		_	1730 1800
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Czechoslovakia	R Prague	21505 15110 13715 11990 11685	1990 11685	5096	Afr/As		11/21/87
	R Berlin Int'l	15255 15145 13610 9665	5996		Af		65/19/88
	R Bucharest	15340 15270 11940 11790	1796		Afr		06/05/88
	R Canada Int'l	17620 15260			Afr	Sat/Sun to 1900	09/30/89
	R Prague	7345 5930			Eu		05/08/87
Fed Rep Sermany	R Deutsche Welle	17715 15135 13790 11785	1785		SACRE Afr		05/01/88
	AIR	15360 11946			605/E Afr		04/17/87
	R Cote-d'Ivoire	7215				exc Sundays	12/05/87
	R Kummit	11665			Eu/NA/Aus/NZ		68/22/87
	KYDI	9495			Japan	340 deg	02/15/88
	Radio RSA	15365 11875			W&C Afr/Uk/Ireland		04/24/88
	KNLS	11700			ĤS		05/19/88
	MCSN	15390			E Afr	75 deg	03/16/88
	WHRI	17830 13760			Eu/CA/SA		02/15/88
	MYFR	15170 13695			Eu		11/04/87
	RKiev	11780 9710 9560 7	7330		Eu		05/19/88
	В Мозсом	15150 11840			World Service	11840 v Cuba	05/31/88
	V of Vietnam	15010 12010 9645				٠	05/28/88
	R Sofia	9700 7155 6070			# Eu		03/16/88
	R Canada Int'l	17875 15325 11945 9	9555 7235		W Eu	M-F 41/49a v UK	64/30/88
	R Havana	0196			Eu		12/26/87
	R Finland	15185 11755 9550 6	6120		Eu /Af		04/18/88
	R Budapest	9835	9585 9520	6110	Eu		04/16/88
	R Nederland	9540	9050		Afr/Eu	13&17s Fon, 31s Madg 02/23/88	9 02/23/88
	R New Zealand Int'l	15150 12045			Pac		05/17/88
	R Sweden	15240			fifr		04/21/88
	M Swiss Int'l	11955 9885			Afr		05/09/87
	AIR				605/W Eu		07/04/88
	R Afghanistan				Eu		04/20/88
	R Algiers	15215 9640	9509				01/30/88
	R Australia	7215 7205	9080 9032		As/Fac/PapNS		05/21/88
	R Canada Int'l	17820 15260			Afr	Mon-Fra	09/30/86
	R Prague	7345 5936			Eu		18/80/60
	HCJB	17790 15270 11740			Eu		03/14/88
	Kol Israel	15592 15485 13625 11605	0106 5091		NA/Eu/Afr		88/02/99
	R Japan	11705 9640 9505			605/4m/0c		04/10/88
	R Norway	15310 15220 9590			NA/Eu/NZ	Eng Sur only	04/23/88
	R Portugal	15250 11870			Afr	Mon-Fri	03/07/88
	Radio RSA	9616 7270 4990			A4r/ME		05/31/88

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05/17/68	06/25/88	11/04/87	05/31/88	05/10/00	70/1/1/20	00/10/10	29/40//0	00/10/70	70/01/20	05/20/00	02/10/00	05/11/00	00/1/1/00	00/27/20	05/01/00	00/00/00	02/07/60	04/04/00	04/11/00	05/10/00	05/20/00	04/27/88	05/07/88	04/10/88	02/14/88	05/31/88	05/17/88	05/12/188	04/05/00	00/07/07	09/17/00	00/10/100	89/60//0	08/1//8/	02/23/88	05/28/88	88/52/90
	70 deg				200	CHIA HEND		111111111111111111111111111111111111111	7 - 101							00/17/50 00/00/80 AH 08/18/ 00/6-13/50	4D 14/12 0017 DC/8C					Fna Sun anly		100 den	622 (2) y	11840 v Cubs									11740 & 9540 v Madg		
Afr/ME/Eu Eu	Canada	Canada	UK/Ireland	***		- FO 200	FU/N Q4r/MF/Gs/FNA	F11	3 = 4	Eu/MF/Afr	Great Britain	13	GOS/W En/Afr		As/Par/PanNS	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3	F As/Indon	130	3 3	3 4	NA/Eu	Eu	CA/Carib		anivas pira		Near Fact	D-t-	De /Dor /Donie	For Aug	77	1 050		# FFF		SA
																6630			6110																		
													7412		6035	9555			9520																		
5925			7330						7145				9755		7205				9585															OFAD	7540		
11790 3985		i	9630	9665	7430	6955	3778		0696	6480	7275		9910	6190	7215	15325			9835									7235			0209	2559		2000		2012	
5375 15125 11790 9535 6165 3985			11930	13610	9425	9440		9605	9750	7550	9710		11620	7250	9580	17820		9465	11910	9779	9325	9590				11840	12085	9575	9375	9580	7115	9440		1740	2610	20107	17.73
15375	15690	1/8/1	154/5	15255	11645	11515	5916	11800	11940	15575	11800	6115	11860	9645	9620	17875	11500	15225	15160	15230	9345	15310	9825	17775	15390	15475 11840	15095 12085	11800	11835	9620	7155	11515	15375	15540 11740	15010 12010	1 44721	13340 11/2
Sp Foreign Radio R Swiss Int'l	ECC.		v noscow V of Vietnam	R Berlin Int'1	V of Greece	R Beijing	R Tehran	R Portugal	R Bucharest	R Korea	RAI	R Berlin Int'l	AIR	Vatican Radio	R Australia	R Canada Int'l	R Beijing	KSDA	R Budapest	R Baghdad	R Pyongyang	R Norway	V of Turkey	KVDH	NCOM	R Moscow	R Damascus	RAI	R Tirana	R Australia	R Sofia	R Beijing	8 Cairo	To come and the co	V of Vietnam		n navana
Spain Switzerland	USA USA	HCD 1350	Vietnam	German Dem Rep	Greece	China	Iran	Portugal	Romania	South Korea		German Dem Rep	India	Vatican State	Australia	Canada	China	Guas	Hungary	Iraq	North Korea	Norway	Turkey	USA	USA	USSR	Syria	Italy	Albania	Australia	Bulgaria	China	Egypt	Netherlands	Vietnam	- Figure 1	
2000	2100	2000	1930	2000	1930	2030	2025	2000	2025	2030	1955	2030	2045	2010	2030	2030	2100	2200	2030	2200	2050		2050											_	2100	_	
1900	1000	2001	1900	1915	1920	1930	1930	1930	1930	1930	1935	1945	1945	1950	T/V-2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2005	2025	2030	2630	2030	2030	2030	2030	2030	2046	

India	AIR	11715 11620	0155	9550	7412	605/W Eu/Aus/NZ		03/28/67
Vatican State	Vatican Radio	15120 11760 11700	11760	9625		Africa		01/03/88
Australia	R Australia	15395 15240	15160	9620	9580	As/Pac/PapN6		05/21/88
Relation	BRI	9925 5910				NA/Eu		02/27/88
Camerdon	R Cameroon	5010 4850					news in English	12/23/87
Canada	R Canada Int'l	-				₩ Eu	Mon-Fri	04/28/88
China	R Beriina	11500 9620	3585			Εū	75m v Switzerland	07/04/88
Fed Rep Bermany	R Deutsche Welle			6185		Aus/As		06/05/88
Finland	R Finland	15400 11945 11755	11755	6120		SA/F East/Eu/Af		04/18/88
German Dem Rep	R Berlin Int'l	6125				ENA		05/19/88
. Bhana	Ghana BC Corp	3366					News in English	12/23/87
Japan	R Japan	11850 11815	5696	9640		605/As/Oc		04/10/88
Romania	R Bucharest	11940 9750	0696	7145		Eu		05/19/67
Spain	Sp Foreign Radio	11790 9765				Eu		05/17/86
Sweden	R Sweden	11845 6065				Afr/Eu		04/21/88
Switzerland	R Swiss Int'l	15576 12035	5885			Afr		05/05/87
USA	HHR1	17830 9776				Eu/Ch/Sh		02/15/88
USA	WRND	13760				MA/CA/Eu	20 deg	02/15/86
USSR	K Moscow	11840				World Service	11840 v Cuba	05/31/88
Syria	F Damascus	15095 9950	_			W.		05/31/88
USA	VBA	17800 1778	15580	15410 1	17800 17785 15580 15410 15205 9760 7205	Afr/ME		04/23/88
Eavot	R Cairo	0066				Eu		04/02/68
Albania	R Tirana	9480 7065				Eu		06/05/88
Australia	R Australia	15395 1524	15240 15160			As/Pac/PapNG		05/21/88
Austria	DRF	11915 9870	6155	5945		# Afr/Eu	5u 2100-	05/19/68
Bulgaria	R Sofia	11950 9700	_			NA/W Eu		07/26/88
Canada	R Canada Int'l	17820 1515	5150 11860			Afr		10/03/87
Ecuador	HCJB	17790 15270 11740	11740			Eu		03/14/88
Israel	Kol Israel	15640 1559	13725	13625 1	15592 13725 13625 12080 11605	LA/NA/Eu		07/24/88
USSR	R Vilnius	6100				Eu		05/17/88
German Dem Rep	R Berlin Int'l	5965 6125				Eu/ENA		05/19/88
Argentina	RAE	11710 9690	_			Americas		09/25/87
Australia	R Australia	17795 15395 15320 15240 15160	15320	15240 1	5160	As/Pac/PapN6		05/21/88
Canada	R Canada Int'l	11705 9755	0955 5			SE As/NA	11705 v Japan	04/28/88
Czechoslovakia	R Prague	9022				En		05/14/87
England	BBC	6175 5575	No.			Morid Service/NA	6175 Caribbean	11/12/87
Guam	KSDA	15125 11750	,			Phil		04/20/88
Italy	RAI	15330 11800	0 9710			Japan		05/27/88
N Mariana Is	KV01	15405				Japan	340 deg	12/03/87
Norway	R Norway	15180 15165	w5			54/A4/Eu	Eng Sun only	04/23/88

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05/21/88	04/17/88	04/20/88	03/16/88	05/19/88	07/26/88	01/03/88	03/13/88	03/28/87	05/28/88	05/28/88	11/12/87	12/23/67	05/09/88	08/29/87	11/12/87	06/05/88	04/24/88	12/28/87	03/01/88	05/19/88	05/19/88	06/05/88	04/16/88	03/13/88	04/16/88	05/01/88	05/19/88	05/28/88	08/03/87	05/19/88	05/17/88	05/28/88
WYFR:17845 & 15440	2u	70 deg	90 deo									News in English			9590 S, 9515 A		11800 v Gabon						Mon-Sat	Sa/Su-0000	exc Su				Eng news			Morld News Service
Eu/AusN7 SE As/NA/Eu/ME	SA	Canada	W Afr	9610 ENA	A.M.	As/Aus/NI			A		World Service/NA		NA/W Eu	Carib	World Service/NA	NA AN	GOS/As/Eu/NE/Af	An	MA	ENA	Eu/NA	NA	SA/NA	₩	AM.	Eu	₩		MA	ENA	Pac/Aus/Melanesia	605
				5979																5 9530					0		۵					
				986 0	0										ري د		4			5 9765					0 6110		0 9640					
15 G				11850 11780 11750 11710	0 7400										5 5975		7810 15230 15195 11815 11800			0 9865	r.				5 9520		0 9800					
0 9955 5 7160				0 1175	5 9640	n.s	0			כיו	10				5 6175	li)	5 1181			11780 11750 11710	5 6135	_			5 9585		5455 15180 13645 11790					
7845 15440 15370 7760 9685 9445				0 1178	0 13645	5 6015	0 5980			9645	5 5975	-0	0	10		5 9435	1519		10	1175(6200		_	9835		1364	9645		_		
5 15440	_	_	_	3 1185	15180	9615	7240	_		12010	6175		6700	9755	9515	11605	1523(3650 11735	696	11780	7270	7065		2960	5160 11910		1518(-	9395	9809		
17845	15280	15580	15300	15475	15455	11830	9620	6110	15575	15010	7325	4915	11950	11730	9590	12080 1	17810	13650	11705	15475 1	9525	9760	9925	9755	15160	6190	15455	15010	11645	9730	15150	15575
V of Free China V of Turkey	KGEI	KUSW	MCSN	R Moscow	R Vilnius	Vatican Radio	R Yuqoslavia	R Mediterranean	R Korea	V of Vietnam	BRC	Ghana BC Corp	R Sofia	R Canada Int'l	BRC	Kol Israel	R Japan	R Pyongyang	R Sweden	R Moscow	R Polania	R Tirana	BRT	R Canada Int'i	R Budapest	R Swiss Int'l	R Kiev	V of Vietnam	V of Greece	R Berlin Int'l	R New Zealand Int'l	R Korea
Taiwan Turkey	USA	USA	USA	USSR	USSR	Vatican State	Yugoslavia	Maita	South Korea	Vietnam	England	Bhana	Bulgaria	Canada	England	Israel	Japan	North Korea	Sweden	USSR	Poland	Albania	Belgium	Canada	Hungary	Switzerland	USSR	Vietnam	Greece	German Dem Rep	New Zealand	South Korea
2300	2230	0100	2400	2300	2230	2225	2230	2330	2330	2300	2300	2255	0000	2330	0030	2330	2400	2350	2330	0000	2355	0000	2355	0030	0000	2400	0000	2400	2345	0030	0145	2400
2200	2200	2200	2200	2200	2200	2205	2213	2230	2230	2230	2245	2245	_ 2300	2300	2300	2300	2300	2300	2300	2300	2305	2330	2330	2330	2330	2330	2330	2330	2335	2345	2345	2345

EWGLISH LANSUAGE DX SHOWS: By Day of Week Compiled by Thomas K. Sundstrom, WZXB

Shortwave DX Program	Start Start Time Time	Start Start Time Time Country	ountry	Station	Freq Freq Freq Freq #1 #2 #3 #4		Freq Freq Freq 45 46 47	Target Area	Notes re DX Show	Last Updated
** DAY OF THE WEEK: Sunday	unday							4 2		000
SWL Digest	0002	0000	Canada	K Canada Int 1	0960	i i	ų	T .		02/12/88
Communications World 0110	0110	0110	JSA	V0A	11580	0596		Americas		04/73/88
Sk Merry-6o-Round	0220	0500	Switzerland	R Swiss Int'l	12035	9725 6135	22 2362	NA.		05/16/66
Communicator	0230	0500	Australia	K Australia	17795 17750 17715	15240 15180	90	As/Pac/PapM6		05/21/88
Di Party Line	0230	0200	Ecuador	HCJB	11775 5720 6230			MA		05/03/86
Amateur Radio Spectr	0220	0200	South Africa	Radio RSA	9610 9580 6010			NA		02/28/86
SH Merry-Bo-Round		0640	Switzerland	R Swiss Int'1	12035 9885 9725	6135		MA		05/16/86
SW Feedback	0535	0500	South Korea	k Korea	9570 7275 6060			An/605		07/10/88
DX Party Line	0630	0200	Ecuador	HC3B	11775 9720 6230			泛		12/20/87
Communicator	0736	0730	Australia	K Australia	17750 17715 11720	9655 5995	75	As/Pac/PapM5		12/27/87
AWR DX Program	0815	0080	Portugal	AWR Europe	6910			Eu		63/28/88
SN Feedback	0835	0600	South Korea	K korea	13670 7550			Eu		07/10/88
Pacific DX Magazine	0845	0805	eua∗.	KTWR	11805			Japan		04/22/88
DX Corner	0925	0050	Japan	F Japan	17810 15235 11885 11840	11840		605/As/Dc		04/03/88
SW Club	0945	6945	Hungary	F. Budapest	15160 11910 9835	9585	9520 6110	Eu		04/16/88
Shortwave Panorama	1135	1130	Austria	ORF	17870 15520 11915	6155		ENA/Aus/As/Eu		04/10/88
SW Feedback	1135	1160	South Korea	R Korea	15575			ME/Afr		
DX Programme	1200	1200	USSR	K Tashkent	11785 9715 9645	9540	7275	Ą≥	Su after 2nd Sat/mo	
Communicator	1230	1230	Australia	R Australia	5710	7215	7205 6080 60	6080 6060 As/Pac/FapN6		12/25/87
SW Feedback	1335	1300	South Korea	& Korea	15575 9750 9570			Am/SE As		07/10/83
DX Corner	1525	1500	Japan	R Japan	21700 11815 9695	9505		60S/4s/Am/Eu/ME		04/03/88
SW Feedback	1535	1500	South Korea	E horea	9870 5975			NE/64r/60S		07/10/88
Shortwave Panorama	1635	1630	Austria	DRF	11780 11915 6115	5945		S As/Eu		05/19/68
Communicator	1730	1530	Australia	R Australia	9580 7215 7205	0809	6035 5995	As/Pac/FapNG		12/27/87
SW Feedback	1735	1760	South Aorea	h korea	15575			Eu		07/10/88
DX Show & Mailbag	1615	1860	USSR	P + 1 E v	11780 9710 9560	7330		Εŭ		03/16/88
DI Corner	1840	1800	South Africa	Radio RSA	15365 11875			W&C Afr/Uk/Ireland		02/05/88
DX Corner	1920	1500	Israel	kol Israel	15592 15485 13625 11605		9010	N6/Eu/Afr		03/11/88
Dx Spot	1920	1900	Spain	Sp Foreign Radio	15375 15125 11790	5979		Afr/ME/Eu		05/17/88
DX Corner	1940	1900	South Africa	hadro RSA	9610 7276 4990			Afr/ME		02/02/88
Sii Feedback	2005	1076	Darrich Longe	in and in a	16,675, 75,50, 64,80			Fu/MF/A6r		07/10/88

12/25/87	05/17/88	05/19/88	03/11/88	03/16/88	05/31/86	07/10/88	03/11/88	03/16/88	03/16/88		03/11/88	01/11/87	07/04/88	03/11/88	01/11/87	04/03/88	03/16/88	02/28/88	04/03/88	63/16/88	05/19/88	12/01/87	10/03/87	04/09/88	05/17/88	05/14/87	04/16/88	05/19/88	05/03/86	05/19/88	03/19/88		03/11/88	03/16/88	05/19/88	04/16/88	05/19/88
																												biweekly		biweekly			biweekly		biweekly		biweekly
As/Pac/PapM6	Eu	# Afr/Eu	LA/NA/Eu	NA/W Eu	Carib	Ass	*I	NA/W Eu	NA		≪ 業	W.A.	NA.	NA.	MA.	605/Asia/NA	MA	₽N.	605/Assa/NA	Afr/NA	ME/WWA/Eu	World Service/WA	A.M.	SE As/Aus	S Pac	FarE/Jap	Eu	ENA	Εu	Eu/ENA	9765 ENA		ENA	9700 ENA	ENA	₩	WMG/ENG
			11605						9640								9640		11840								9520 6110							9765		6110	
			5592 13725 13625 12080 11605						9800							2960	9800		17810 15195 11870 11840												5475 11850 11780 11750 11710 9865			9865		9520	
		5945	13625						11790							11705	15180 13645 11790		15195	7115							9585				11750			11710		9585	0809
		6155	13725	_			9435	_	13645		9435	_		9435		15195	13645	6010		0956	6155				6130		9835		11740		11780			11750		9835	94620
9580	97.65		-		9755		11605	9 9700	5455 15180 13645 11790		2080 11605	9630		2080 11605	9630	7845 17810 15195 11705		9580	17825	11840 11735	9875	5975	_	5510 11695	9745		5160 11910		7790 15270 11740	6125	11850		0809	5475 11780 11750 11710	0809	5160 11910	9730
9620	11790	11915	15640	11950	11730	15575	12080	11950	15455		12080	11880	9875	12080	11880	17845	15455	9610	21610 1	11840	15410	9510	9630	15510	11925	6075	15160	6125	17790	5965	15475		9730	15475	9730	15160	11785
K Australia	So Foreign Radio	DRF	Kol Israel	R Sofia	R Canada Int'l	K korea	kol Israel	& Sofia	R Kiev		Kol Israel	Sp Foreign Radio	ORF	Kol Israel	Sp Foreign Radio	K Japan	K Kiev	Radio RSA	K Japan	R Sofia	ORF	980	Sp Foreign Radio	BRI	HCJB	HCJB	R Budapest	R Berlin Int'l	HCJB	R Berlin Int'l	К Мозсом		A Rerlin Int'1	R Mescow	R Berlin Int'l	f Budapest	R Berlin Int'l
Australia BSA	Spain	Austria	Israel	Bulgaria	Canada	South Korea	Israel	Bulgaria	USSR		Israel	Spain	Austria	Israel	Spain	Japan	USSR	South Africa	Japan	Bulgaria	Austria	England	Spain	Belgium	Ecuador	Ecuador	Hungary	Serman Dem Rep	Ecuador	German Dem Kep	USSR		German Dem Rep	USSR	German Dem Rep	Hungary	Berman Dem Kep
2030	2100	2130	2130	2130	2300	2230	2300	2300	2330		0000	0000	0100	0100	0100	0100	0500	0200	0300	0300	0400	0430	0200	0800	0830	1158	1515	2100	2130	2145	2200		2345	0000	0100	0130	0145
2030	2120	2135	2150	2215	2305	2305	2320	2345	2345	fonday	0020	0020	0100	0120	0120	0125	0215	0245	0325	0345	0405	0450	0520	0800	0930	1206	1515	2120	2130	2205	2250	uesday	0002	0020	0120	0130	0202
Communicator Horld of Radio	DX Spot	Shortwave Panorama	DX Corner	R Sofia Calling	SWL Digest	Sii Feedback	DX Corner	K Spfia Calling	DX Show & Mailbag	** DAY OF THE WEEK: Monday	DX Corner	DX Spot	Shortwave Panorama	DX Corner	DX Spot	DX Corner	DX Show & Mailbag	DX Corner	DX Corner	R Sofia Calling	Shortwave Panorama	Waveguide	DX Spot	Radio World	DX Party Line	DX Party Line	SW Club	RBI DX Club	DX Party Line	RBI DX Club	DX Program	** DAY OF THE WEEK: Tuesday	RBI DX Club	DX Program	RBI DX Club	SW Club	RBI DX Club

05/03/86 03/16/88	biweekly 05/19/88		R Earth repeat 05/31/88	03/16/88	biweekly 05/19/88	03/16/88	12/20/87	02/23/88	03/26/88	12/23/86	05/19/87	05/13/86		04/16/88	06/11/87	delayed 11/13/87	03/26/88	03/26/88	01/30/88	02/26/88	01/30/88	02/26/88		12/16/87	02/26/88	01/30/88	02/26/88	01/30/88	04/10/88	08/22/86	09/64/86	05/15/88	04/16/88	05/04/86
P700 FWA	EN.	Eu/CA/SA R	A/SA	ANA		CNR	MA	World Service/NA	MA/Carib	NA	Afr/Eu	NA		MA	MA	qe	S Pac	S Pac	FarE/Jap	Eu/Afr/ME	пш	Americas		World Service/NA	Americas	4M	Americas	MA	Aus/Carib	Eu/ME/As	S&E As/Eu	MA/CA	Εu	SLE Afr
11775 9720 6236 15475 11780 17750 11710 9845 9745 97	9620		7355	5640 5610 9600 9530 7290 6170	11785 9620	9610	9720		17820 11855 9625	15390 15345	11845 6065	11705 9695		15160 11910 9835 9585 9520 6110	5696	7375	9745 6130	11925	6075	15345		11710 9690		9515 7325 6175 5975	11710 9690	11775 9720 6230	11710 9690	11775 9720 6230	9675 6020		17575 15560 13770 11740 5955		15166 11910 9835 9585 9520 6110	(4540)6020
HEJB P Morrow	R Werlin Int'l	NHK1	WHRI	R Moscow	R Berlin Int'l	Ñ Mosco₩	HC3B	BBC	R Canada Int'l	R Sweden	K Sweden	R Sweden		R Budapest	R Sweden	R for Peace	HCJB	HCJB	HCJB	RAE	HCJB	RAE		388	RAE	HC3B	KAE	HC3B	R Nederland	K Wederland	R Nederland	WRND	F Rudapest	R Nederland
Ecuador		USA	USA	USSR	Serman Dem Kep	USSR	Ecuador	England	Canada	Sweden	Sweden	Sweden		Hungary	Sweden	Costa Rica	Ecuador	Ecuador	Ecuador	Argentina		Argentina		England	-		Argentina	Ecuador	Netherlands	Wether lands	Netherlands	USA	Hungary	Wether lands
0200	_	_	_	00200	5 0345	00200	00200	5 1100	1158	0 1400	0 2100	0 2300	dnesday	0 0130	0 0230	0 0100	0 0700	0 1030	5 1158	0 1730		0 2200	ya.	0 0030		0 0200	0400	0 0200	0 1030	0 1130	0 1430	0 1500	5 1515	1650 51630
0230	0320			0340	0405	0540	0630	1115	1230	ers 1410	ers 2110	ers 2310		0130	ers 6240	0300	0800	1030	1206	1750	2130	2220	: Thursday	0130	0220	0230	0420	0630	1050	1150	1450	1500	15.15	192
DX Party Line	DA Program ERI DY Flub	Sweden Calling Diers	Sil Merry-So-Round	DX Progras	RBI DX Club	DX Program	DX Party Line	Mavequide	SWL Digest	Sweden Calling Diers	Sweden Calling Diers	Sweden Calling Diers	HE DAY OF THE WEEK: WE	SW Club	Sweden Calling Diers	World of Radio	Ham Radio Today	Ham Radio Today	Ham Radio Today	Dier's Special	Han Radio Today	Dier's Special	ES DAY OF THE MESK: Th	Havenide	Dier's Special	Ham Radio Today	Dier's Special	Ham Radio Today	Media Metwork	Media Metwork	Media Network	World of Radio	SW Club	Media Wetwork

03/16/88	04/16/88	05/30/86	11/21/86	04/22/88	11/13/87	11/13/87	12/22/87	03/16/88	03/16/88		11/13/87	04/16/88	01/16/88	03/16/88	03/16/88	05/17/88	04/16/88	98/90/60	05/14/87	04/09/88	10/16/86	09/04/86	02/22/88	05/24/86	04/09/88	04/23/88	04/09/88	02/28/88	03/13/88	05/07/88	04/09/88	04/23/88	05/24/86	05/03/86	10/13/86	05/07/88	04/09/88	04/02/88
								ist of wkend series			detayed										2nd Sat of month									Biweekly						Biweekly		alt. freq 7355
NA/CA	MA	ENA	世代書	AusNZ	India/ME	Afr	Eu	Eu/NA	NA/W Eu			AM	SA/NA	MA/CA	W Eu	S Pac	Eu	SE As/Aus/NZ	Far E/Jap	MA/SE As	As	E Afr/India/Aus/NZ	India	ME/E Afr	Afr	Afr	Eu	W&C Afr/UK/Ireland	M Eu	ξū	NA/Eu	9700 7205 Afr/ME	Afr	Eu	Afr	SE AS/NA/Eu/ME	SAZNA	NA/CA/Eu
	6110											6110	0909				6110					11695							6030			0026						
	9520											9520	0096				9520				7275	17830 15570 15135 13685 11695							9555			15205						
	9585	6020										9585	9635				9585	11935			9540	15135		13685					11945			7785 15580 15410 15205				7160		
	9835	6165						6070				9835	9680					13685			5496	15570		17830 15430 13685					17820 15325 11945			15580	9885	11740	11880	9445		
4		9590	6165			11870			9700			11910	9705		9700	9745	11910	15570		15210				17830	21810 17595			11875	17820		5910	_	12035	15270	15150	5895		
7355	15160	9895	9715	11805	15245	15250	11800	7155	11950		7375	15160	11840	9182	11720	11925	15160	17830	6075	15590	11785	21695	9820	21630	21810	15205	11695	15365	17875	9825	9925	17800	15570	17790	17820	17760	9925	13760
. RND	R Budapest	R Nederland	R Nederland	KTAR	R Portugal	R Portugal	R Portugal	R Sofia	R Softa		R for Peace	R Budapest	R Portugal	MRNO	R Sofia	HCJB	R Budapest	R Swiss Int'l	HCJB	887	R Tashkent	R Swiss Int'l	KTWR	R Swiss Int'l	BRT	VGA	887	Radio RSA	R Canada Int'i	V of Turkey	BRT	VOA	R Swiss int'l	HC3B	R Canada Int'l	V of Turkey	BRT	MRNO
USA	Hungary	Wetherlands	Wetherlands	Guam	Portugal	Portugal	Portugal	Bulgaria	Bulgaria		Costa Rica	Hungary	Portugal	USA	Bulgaria	Ecuador	Hungary	Switzerland	Ecuador	Belgium	USSR	Smitzerland	Suam	Switzerland	Belgium	บรล	Belgrum	South Africa	Canada	Turkey	Belgium	USA	Switzerland	Ecuador	Canada	Turkey	Belgium	บรล
0000	0130	0230	0530	0630	1600	1900	1930	2030	2300	>-	0100	0130	0230	0300	0630	0830	1030	1100	1158	1330	1330	1330	1500	1530	1630	1710	1730	0081	2000	2000	2100	2110	2100	2130	2130	2200	2330	2100
0030	0110	0.250		1000	1912	1915	1945	2045	2325	Saturday	0100	0130	0245	0300	0643	0930	1030	1115	1206	1330	1330	1345	1515	1545	1630	1710	1730	1845	2002	2020	2100	2110	2115	2130	2135	2220	2330	2330
** DAY OF THE WEEK: Friday World of Radio	SW Club	Media Network	Media Network	Pacific DX Magazine	DX Shaw	DX Show	DX Show	R Sofia Calling	R Sofia Calling	** DAY OF THE WEEK! 9	World of Radio	SW Club	DX Show	World of Radio	R Sofia Calling	DX Party Line	SW Club	SW Kerry-Ba-Round	DX Party Line	Radio World	DX Programme	SW Merry-6a-Round	Pacific DX Magazine	SW Merry-6o-Round	Radio World	Communications World 1710	Radio World	Amateur Radio Spectr 1845	SWL Digest	DX Radio Tips	Radio World	Communications World	SW Merry-Go-Round	DX Party Line	SWL Digest	DX Radio Tips	Radio World	World of Radio

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